MONTCAS, PHASE 2
Criterion-Referenced Test Alternate Assessment (CRT-Alternate)

2006
TECHNICAL MANUAL

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SECTION I: ASSESSMENT DEVELOPMENT

CHAPTER 1—BACKGROUND AND OVERVIEW

PURPOSE OF THIS MANUAL

The purpose of this manual is to document the technical aspects of the 2006 MontCAS, Phase 2 Criterion-Referenced Test Alternate Assessment (CRT-Alternate). In the spring of 2006, students in grades 3 through 8 and 10 participated in the administration of the CRT-Alternate; during this administration, reading and mathematics were assessed. This represents the second year of the CRT-Alternate program, which will expand next year to include science in grades 4, 8, and 10. This report provides information about the technical quality of those assessments, including a description of the processes used to develop, administer, and score the tests and to analyze the test results.

Historically, while some parts of a technical report may have been used by educated laypersons, the intended audience were experts in psychometrics and educational research. This edition of the CRT-Alternate technical report is an attempt to make the information contained herein more accessible to educated laypeople by providing richer descriptions of general categories of information. In making some of the information more accessible we have purposefully preserved the depth of technical information that has historically been provided in our technical manuals. The reader will find that some of the discussion and tables continue to require a working knowledge of measurement concepts such as “reliability” and “validity,” and statistical concepts such as “correlation” and “central tendency.” To fully understand some data, the reader will also have to possess basic familiarity with advanced topics in measurement and statistics.

PURPOSE OF THE CRT-ALTERNATE

The Individuals with Disabilities Education Act (IDEA) requires that students with disabilities be included in each state’s system of accountability and that students with disabilities have access to the general curriculum. The No Child Left Behind Act (NCLB) also speaks to the inclusion of all children in a state’s accountability system by requiring states to report student

achievement for all students, as well as for groups of students on a disaggregated basis. These federal laws reflect an ongoing concern about equity: All students should be academically challenged and taught to high standards. It is also necessary that all students be involved in the educational accountability system.

To ensure the participation of all students in the state's accountability system, Montana has developed the Criterion-Referenced Test Alternate Assessment (CRT-Alternate). The CRT-Alternate is an evidence-based test that is aligned with Montana's Content Standards and Expanded Benchmarks and measures student performance based on alternate achievement standards. It is expected that only those IDEA-eligible students with the most significant cognitive disabilities will participate in the CRT-Alternate.

The CRT-Alternate is based on, and aligned to, Montana's Content Standards and Expanded Benchmarks in reading and mathematics. Montana educators worked with OPI and its contractor, Measured Progress, in the development and review (content and bias) of these tests to assess how well students have learned the Montana Content Standards and Expanded Benchmarks for their grade. The United States Department of Education (USDOE) approved the CRT-Alternate in reading and mathematics for grades 3–8 and 10 by school year 2005–2006 and in science at one grade in each of three grade spans (e.g., 4, 8, and 10) by school year 2007–2008.

The underlying principal of the assessment is that all students should be taught using Montana's Content Standards and Expanded Benchmarks in reading and mathematics. The tests are intended to measure how a student is performing in relation to those Content Standards. Results should be used to inform future instruction in the Montana Content Standards.

This was the third year of implementation. After the first year, extensive revisions were made based on feedback from teachers who administered the assessment. Alternate assessments have only been in place since 2000. The field is still in the learning stages as to appropriate ways to address reliability and validity for alternate assessments.

To address reliability, several analyses were conducted, including:

- reliability of performance-level categorization,
- accuracy,
- consistency,
- calculating accuracy,
- calculating consistency and,
- kappa.

The summary for these analysis can be found in Chapter 10. Each chapter in this manual contributes important information to the validity argument by addressing one or more of the following aspects of the CRT-Alternate:

- test development,
- test alignment,
- test administration,
- scoring item analses,
- reliability,
- scaling,
- performance-levels and,
- reporting.

These aspects as well as other information on validity can be found in Chapter 13.

TEST SCHEDULING

The CRT-Alternate was given during the spring: **reading** and **mathematics** were administered to grades 3 through 8 and 10 during a six-week window (February 13–March 29, 2006). Schools were able to schedule testing sessions at any time during this period. This window, longer than that for the CRT, allows teachers administering the CRT-Alternate extra time to prepare and adapt test activity materials needed for testing.

The CRT-Alternate is an untimed assessment. Teachers administering the assessment were instructed to watch students for indications that a break may be needed. Breaks were inserted in the test booklet. Teachers could choose to stop at the breaks inserted or at other points in the assessment.

ORGANIZATION OF THIS MANUAL

The organization of this manual is based on the conceptual flow of an assessment's life span. It begins with the initial test specification and addresses all the intermediate steps that lead to final score reporting.

Section I covers the development of the CRT-Alternate tests. It consists of six chapters covering:

- general design,
- test development process,
- specific designs of the reading and mathematics assessments, and the
- test format.

Section II consists of a single chapter:

- administration of the tests.

Section III consists of six chapters covering:

- scoring,
- item analysis,
- reliability,
- scaling,
- reporting, and
- validity.

Section IV contains references and Section V contains the appendices.

CHAPTER 2—INCLUSION

SAMPLE SIZE

Because the regular CRT provides full access to the vast majority of students, it is expected that only approximately 100 students per grade will participate in the CRT-Alternate. Due to very small sample sizes (70 to 105 students in each grade/content combination), it is unreasonable to calculate Differential Item Functioning (DIF) statistics for the Montana CRT-Alternate. That is, Type I error rates would be unreasonably high and would result in incorrect conclusions regarding the functioning of the items between reference and focal groups. Thus, DIF statistics are not included as part of this technical report.

Number of Students Participating in Each Assessment

Grade	Content Area	N
3	Mathematics	98
	Reading	99
4	Mathematics	79
	Reading	79
5	Mathematics	105
	Reading	104
6	Mathematics	80
	Reading	79
7	Mathematics	70
	Reading	70
8	Mathematics	86
	Reading	87
10	Mathematics	102
	Reading	103

In accordance with 34 CFR 200.13 Adequate Yearly Progress in General, there is a 1% cap applied to the number of proficient and advanced scores based on the alternate assessment that may be included in AYP calculations at both the state and district levels.

PARTICIPATION GUIDELINES

The decision as to how a student with disabilities will participate in the state's accountability system is made by the student's Individualized Education Program (IEP) team. When

considering whether students with disabilities should participate in the CRT-Alternate, the IEP team should address each of the questions in the chart that follows:

For each of the statements below, answer YES or NO		
Does the student have an active IEP and receive services under the Individuals with Disabilities Education Act (IDEA)?	YES	NO
Do the student's demonstrated cognitive abilities and adaptive behavior require substantial adjustments to the general curriculum?	YES	NO
Do the student's learning objectives and expected outcomes focus on functional application of skills, as illustrated in the student's IEP's annual goals and short-term objectives?	YES	NO
Does the student require direct and extensive instruction to acquire, maintain, generalize and transfer new skills?	YES	NO

- **If you answer "NO" to <u>any</u> of the above questions, the student must participate in the regular CRT.**
- **If all answers are "YES," the student is eligible to take the alternate assessment and is considered to be a student with a significant cognitive disability.**

The decision to determine a student's eligibility to participate in the CRT-Alternate <u>may not be based on</u>

- excessive or extended absence;
- disability category;
- social, cultural or economic difference;
- the amount of time receiving special education services; or
- academic achievement significantly lower than his or her same age peers.

CHAPTER 3—OVERVIEW OF TEST DESIGN

CRT-ALTERNATE

CRT-Alternate test items are directly linked to **Montana's content standards and expanded benchmarks**. (See page 19 for more information about the expanded benchmarks.) The Content Standards are the basis for the reporting categories developed for each content area and are used to help guide the development of test items. No other content or process is subject to statewide assessment. An item may address part, all, or several of the benchmarks within a standard or standards.

ASSESSMENT TYPES

Although the CRT-Alternate for all grades is a performance-task assessment, the format differs slightly depending on the grade assessed. This difference is due to the fact that the assessments for grades 4, 8, and 10 being developed two years earlier than the assessments for grades 3, 5, 6, and 7. All assessments follow the same scaffolding rubric, follow the same expanded benchmarks, and are designed to show a student's performance in relation to the Montana reading and mathematics standards and benchmarks. However, there are some notable differences between the two formats. The major differences are outlined below:

Topic	CRT-Alternate for Grades 3, 5, 6, and 7	CRT-Alternate for Grades 4, 8, and 10
Format	• Tasklet— five short activities of five items each per content • Total of 25 items	• One overall activity with 22–35 items per content
Introductory Items	• First item in each tasklet designed to get student's attention, introduce the activity, and show materials to be used • Scored at levels 4 or 0 of the rubric	• First few items in each activity, and may have one or more interspersed as new materials are introduced in later sections of the activity • Designed to get student's attention, introduce the activity, and show materials to be used • Scored at levels 4 or 0 of the rubric
Breaks	• Breaks between tasklets	• Suggested breaks built into activity
Reading Passage	• Page 2 of each reading tasklet	• Grade 4 only page 2 of the reading

		activity
Student Evidence	• 1–2 tasklets in each content require student evidence • Two forms need to be filled out for each item that requires evidence	• Each overall activity requires evidence • Two forms need to be filled out for each item that requires evidence
Scoring Rule	• Student must try every tasklet • Halt the administration of a tasklet only if the student scores a 0 for three consecutive items after administering the tasklet in two different test sessions	• Halt the administration of the activity after the student scores a 0 for three consecutive items after administering the activity in two different test sessions
Materials Kits	• Tabs in the Materials Kits are labeled by content and tasklet number	• Tabs in the Materials Kits are labeled by content and separated by Activity Materials (A.M.) and Communication Supports (C.S.). Within the two sections, tabs are labeled evidence templates, sentence strips, four-choice grids, number cards, etc.

ASSESSMENT TYPE FOR GRADES 4, 8, AND 10

The CRT-Alternate assessment is a point-in-time test that looks at how students perform in relation to performance indicators that have been expanded from the Montana reading and mathematics standards and benchmarks. Each content area in grades 4, 8, and 10 consists of one age-appropriate activity that has 20 to 35 items in which the teachers are given a script, written directions, and scaffolding levels. Students are encouraged to engage in the activity and show performance on the items through appropriate prompting by the teacher who administers the test activity. The teacher who administers the test activity scores the student on each item through observation using a five-point scoring rubric.

The test activity requires evidence to be collected based on the products that were created during the course of the assessment. Templates were provided for all evidence that was required.

ASSESSMENT TYPE FOR GRADES 3, 5, 6, AND 7

The CRT-Alternate assessment is a point-in-time test that looks at how students perform in relation to performance indicators that have been expanded from the Montana reading and mathematics standards and benchmarks. Each content area in grades 3, 5, 6, and 7 have

five tasklets (short activities) that consist of five questions each, in which the teachers are given a script, written directions, and scaffolding levels. This tasklet format allows for natural breaks in the assessment, so the student may rest and refocus between tasks. Students are encouraged to engage in the activity and show performance on the items through appropriate prompting by the teacher who administers the test activity. The teacher who administers the test activity scores the student on each item through observation using a five-point scoring rubric.

The test activity requires evidence to be collected based on the products that were created during the course of the assessment. Templates were provided for all evidence that was required.

CRT-ALTERNATE ITEMS (ALL GRADES)

Each item of the CRT-Alternate consists of the following:

- materials needed to administer the item,
- setup instructions and script for the teacher to follow if using the test activity,
- scaffolding script for the suggested test activity,
- the correct student response,
- the performance indicator (The performance indicator is what the question is measuring. The performance indicator comes from the Montana Content Standards and Expanded Benchmarks.), and
- activity steps to follow for teachers creating their own activity.

See Chapter 2 for the test format.

SCAFFOLDING AS SCORING

As Gail McGreggor of the University of Montana Missoula notes in her paper titled *Implementation of the CRT-Alternative Strategies to Achieve Interrater Reliability* (Appendix H), “Administration of the CRT-Alt incorporates a response prompting methodology known as the ‘system of least prompts’ (Wolery, Ault & Doyle, 1992), a well-established strategy that has been found to be effective as a teaching procedure for students with severe disabilities

across a wide range of applications (Doyle, Wolery, Ault & Gast, 1988)." The system of least prompts, or scaffolding, requires the teacher (or test administrator) to administer each test item beginning at the highest level of independence. The student is asked the question, and allowed sufficinet time to produce the answer. If the student produces the answer, the teacher records his/her score for that question at the highest level. If the student answers incorrectly, the test administrator asks the question again, but this time using the next-to-highest level of independence for this particular quesiton. The levels of independence are standardized and scripted within the test. This second-highest level of independence usually amounts to removing one or two choices from the set of posssible answers. If the student provids the correct answer this time, the test administrator will record the score at this second highest level of independence. If the student can not provide the correct answer, the test administrator moves on to the next highest level of independence, and so on, until the student is guided (hand-over-hand) to the correct answer and the student's score for that particular item is recorded at the lowest level of independence. More information regarding the research base of this method and a discussion regarding the selection of this method can be found in Appendix H.

TEST FORMAT

GRADES 4, 8, AND 10

In Grades 4, 8, and 10, the CRT-Alternate is composed of two test activities: one for reading and one for mathematics. Each test activity consists of 20 to 35 items and at least one piece of student evidence (work). Since only one test was developed, every student takes the same form of the test. The test stays the same each year, with the exception of the second year, when revisions were made using teacher feedback during a revision workshop. Although the test items are kept secure, the performance indicators, which come from the Montana reading and mathematics content standards and expanded benchmarks, are released every year on the OPI and Measured Progress Web sites. The 2006 released performance indicators are located in Appendix E.

GRADES 3, 5, 6, AND 7

In grades 3, 5, 6, and 7, the CRT-Alternate is composed of ten tasklets: five for reading and five for mathematics. Each tasklet consists of five items relating to the small activity. Some

tasklets require student evidence, and some do not. Creating the test around a series of smaller activities (rather than one single activity as in grades 4, 8, and 10) allows the teacher and student to break the administration into smaller time segments without being as concerned about a disruption in continuity. Since only one test was developed, every student takes the same form of the test. Although the test items are kept secure, the performance indicators, which come from the Montana reading and mathematics content standards and expanded benchmarks, are released every year on the OPI and Measured Progress Web sites. The 2006 released performance indicators are located in Appendix E.

The first page of each activity (in grades 4, 8, and 10) or tasklet (in grades 3, 5, 6, and 7), lists the following:

- content standards,
- a brief explanation of the suggested test activity,
- parameters of the task, and
- materials provided and other materials that are needed

The pages that follow in the math and reading sections of the test booklet consist of the following four columns for each item:

-

Materials for the Activity	Activity Teacher will:	Student Work Student will:	Performance Indicators Use Scoring Guide Transfer scores to student response booklet
The materials that are needed for each item and suggested student communication supports and strategies that may be helpful for some students are described in this column. Most materials can be found in the Materials Kits, but teachers need to supply some materials.	**This column contains information about how to display task materials and prepare the student for the question. A script for the teacher appears in bold and italicized print and suggests language that can be used to present the item.** **Information on how to scaffold levels 3, 2, and 1 of the rubric for items that are scored at levels 4 through 0 is also provided in this column.**	**The correct student response and/or an explanation of how the student should be responding is provided in this column.**	**The performance indicator that is assessed by each item is identified in this column. The performance indicators come from the Montana Content Standards and Expanded Benchmarks.**
SAMPLE TASKLET			
2. • **1 square, 1 circle, 1 rectangle, and 1 triangle.** **Communication support strategies:** • **Student may look at/point to task materials to**	**2. Place the shapes on the work space.** **"Here are the shapes we just looked at. Show me the square."** **Scaffold:** **Level 3: Remove an incorrect response. Repeat task request.**	**2. Indicate the square.**	**2. Identify (name) shapes as circles, squares, triangles, rectangles, and ovals.** o o o o o 4 3 2 1 0 **Performance Indicator:**

express a choice. • **Request may be rephrased to require a yes/no response (e.g., "Is this the square?")** • **Student may tell teacher to "stop" at desired response as teacher sequentially points to each of the 4 choices.**	**Level 2: Remove another incorrect response. Repeat task request.** **Level 1: "This is the square." Assist the student as needed to identify the square.**	**4.1.1.6** **Expanded Benchmark: 4.1.1**

Evidence and Evidence Template(s)

Each of the test activities requires that evidence be collected based on the products that are created during the course of the assessment. A magnifying glass  in the "Student Work, Student will" column of the test booklet indicates when evidence must be collected. Templates are provided in the CRT-Alternate test booklet for all evidence that is required. Teachers have the option of selecting the presentation that best matches the student's abilities and skills:

- written work by the student (e.g., the student collects data and fills out a bar chart with a marker)
- pictures of student output (e.g., the student arranges objects to form an answer to a question about the sequence of events in a story, and a picture captures the arrangement)
- picture symbols pasted on the template or a scanned/photocopied image of the template that the student arranges and that he/she wants to keep
- computer printout of student's keyed responses
- teacher-recorded responses (e.g., the teacher fills out a T-table based on the yes/no answers from a student using a BIGmack switch or eye gaze)
- anecdotal record describing student's actions supplied by the observer (e.g., the observer notes that the student smiled when shown a picture of his/her favorite character in a story)

The evidence templates are used to record student responses to an item when asked. Adapted evidence templates are provided in the Materials Kits and on the Materials CD. The template may need further modifications based on the student's needs. The evidence must be submitted along with the used test booklet. Upon receipt, evidence is scanned and accounted for. OPI was provided with a list of students (and their schools) who did not provide evidence along with their test booklets.

Last Page of the Test Booklet

The last page of the test booklet contains a list of questions for the teacher to answer after the administration of the reading and mathematics test activities.

CHAPTER 4—TEST DEVELOPMENT PROCESS

ITEM AND ACTIVITY DEVELOPMENT

The CRT-Alternate was developed as a collaborative project between Measured Progress and the Montana Office of Public Instruction (OPI) divisions of Assessment, Special Education, and Educational Opportunity and Equity.

An advisory committee, representing perspectives of parents, teachers, administrators, and faculty in higher education, provided input during the development of this assessment. In addition, teacher work groups were formed at several points in the development and revision process. Mathematics and reading item development work groups, composed of general and special education teachers, were formed. These teachers developed test activities that are the basis of the performance tasks for this assessment. A third group of special education teachers and administrators participated in the beta testing of this assessment, providing valuable feedback about the test design.

OPI was responsible for organizing and facilitating committees to review items and reading passages for bias and sensitivity. OPI sent the feedback from the committees to Measured Progress to make the appropriate changes to the items and reading passages.

DEVELOPMENT OF THE READING AND MATHEMATICS EXPANDED BENCHMARKS

The expanded benchmarks were developed for students with significant cognitive disabilities not working at the same level as their age-level counterparts. The expanded benchmarks were developed using Montana's content standards and expanded benchmarks for reading and mathematics. Measured Progress's curriculum and special education specialists developed a draft of the expanded benchmarks. The OPI, beta test teachers, the advisory committee, and the development and revision workshop participants all provided input and recommendations for changes to the original draft. Using these recommendations, Measured Progress revised the expanded benchmarks. This document was further revised to include grade span expectations per new federal legislation. It is expanded from end of grade 4, end of grade 8, and end of grade 12–upon graduation to foundational skills. These are not grade-

level specific, due to the wide diversity of students in this population. This document was used to develop the assessment performance-indicators. The chart on the next page shows how the document is organized and gives an example for each content area. The Montana content standards and expanded benchmarks are not included in this manual because of the length of each document. They are located on the OPI Web site at www.opi.state.mt.us and the Measured Progress Web site at www.measuredprogress.org.

Montana CRT - Alternate Standards and Expanded Benchmarks

Terminology		
Term/Description	**Example**	
Content Area	**Mathematics**	**Reading**
Standard Learning outcome expected for all students throughout all grades	Standard 2: Students demonstrate understanding of and ability to use Numbers and Operations.	Standard 2: Students apply a range of skills and strategies to read.
Essence of the Standard A statement of the standard separating the essential components	Number concepts, concepts of operations, computing and estimating	Interpret print and nonprint information
Benchmark **Grade Level Expectation (GLE)** Expectation for typical students described for each grade level	2.2, Grade 4: Students will use the number system by counting, grouping, and applying place value concepts.	2.6, Grade 8: Students will develop vocabulary through the use of context clues, analysis of word parts, auditory clues, and reference sources (e.g., dictionary, thesaurus, and glossary).
Expanded Benchmark Benchmark skill or concept expanded from the typical GLE to a basic level	2.2.1: The student will demonstrate an understanding of whole numbers.	2.6.2: The student will use words/pictures/symbols/objects to communicate.
Performance Indicator Expanded benchmark expressed in a measurable and observable statement of a specific performance	2.2.1.2: The student will demonstrate the concept of one (e.g., “Hit the switch one time”; “Give me one”).	2.6.2.1: The student will identify a word/picture/symbol/object used to name a familiar place.
Prompt The script for the directions the test administrator will deliver to the student, calling for the specific behavior	Item 4: “These are counters. We are going to use these in our activity. Show me one counter.”	Item 4: “Show me the word/picture/symbol/object that means ‘library.’”

TOTAL NUMBERS OF ITEMS DEVELOPED BY GRADE AND CONTENT

GRADE	READING	MATH
3	25	25
4	22	28
5	25	25
6	25	25
7	25	25
8	24	32
10	27	31

CRT-ALTERNATE ITEM DEVELOPMENT PROCESS OVERVIEW

As previously noted, there were separate development process cycles used to create the body of tests that now compromise the current CRT-Alternate. Grades 4, 8, and 10 were developed between August 2003 and October 2004. An overview of the test development process for the CRT-Alternate program in grades 4, 8, and 10 is outlined in the technical manual for 2005. The second cycle of development, for alternate assessments in grades 3, 5, 6, and 7, took place between March 2005 and January 2006, and is outlined below. For all grades, the test-development process began with the expansion of benchmarks for reading and mathematics in 2003. Using the expanded benchmarks for reading and mathematics, staff from Measured Progress created a test blueprint for each grade. The blueprint indicated which expanded benchmarks should be tested at each grade. Once the blueprint was approved by the state, development workshop were held. At these development workshops Montana educators came up with tasklet ideas to use in the creation of the tests. Staff from Measured Progress selected passages for reading and topics for Math and began creating draft tasklets. The state was involved at every step in the process to provide feedback for changes to the tasklets, or give approval. After the editorial and approval phase, the tasklets were beta tested using Montana educators and their students. After the beta test, revisions were made based on feedback from the field.

DEVELOPMENT PROCESS OVERVIEW

DEVELOPMENT STEP	PROCEDURE OF THE STEP
Development and revision of	• Measured Progress curriculum and special education specialists developed a draft of the expanded

Expanded Benchmarks for reading and mathematics (Aug. 2003–Oct. 2004)	benchmarks. • The OPI reviewed it. • Beta test teachers provided input. • The advisory committee and revision and development workshop participants provided recommendations. • The expanded benchmarks were revised to include grade-span expectations per new federal legislation.
Blueprint design (Oct. 2004)	• Measured Progress curriculum and special education specialists created initial assessment blueprint. • Blueprint was approved by the state.
Development workshops (Oct. 2004)	Measured Progress curriculum and special education specialists and the OPI • provided item development training to Montana participants; • facilitated the development of the item ideas by the participants.
Passage/topic selection and development (Nov. 2005–Apr. 2005)	Reading passages and mathematics topics are selected for the tasklets: • used the items and activities that were developed at the development workshops to prepare topics and passages for the state; • state was given the topics and passages to approve; • state made approvals.
Tasklet creation (May–Aug. 2005)	Measured Progress curriculum and special education specialists: • used the blueprint, tasklet ideas, and passages/topics to create test items (tasklets).
Editorial review of items (May–Aug.2005)	All items were reviewed by members of the Measured Progress Publications staff to ensure: • clarity and unambiguousness of items; • correct grammar, punctuation, usage, and spelling; • technical quality with respect to stems, options, and scoring guides; • compliance with OPI sensitivity standards and style guidelines.
Beta test (Oct. 2005)	• Approximately 20 students participated in the beta test. • Beta test teachers tested a student on one content area and sent feedback to Measured Progress on the assessment items and activity. • Beta test participants gave additional feedback in a conference call. • The Advisory Committee reviewed all grades and contents and provided feedback via a form and conference call.
Revisions after beta test	• Using the feedback from the beta test teachers and the advisory committee, the OPI and Measured Progress

(Nov. 2005–Jan. 2006)	revised the assessment. • Level 1 scaffolding script was added to every item on the test that is scored using all five levels of the rubric.

REVISIONS MADE TO THE SPRING 2005 ASSESSMENTS FOR GRADES 4, 8, AND 10

Using feedback from teachers who administered the CRT-Alternate in the spring of 2004, Montana special education and general education teachers, the OPI, and Measured Progress revised the following in the assessments:

- Level 1 scaffolding language was added to the "Activity, Teacher will:" column. This was added to give teachers a clearer direction on how to scaffold this level.
- The "Materials for the Activity" column was added. This column lists the materials needed for each item, as well as communication-support strategies. This column was added to prepare teachers on what materials are needed to administer each item and for students to respond to each item. It also gives teachers ideas for student-communication supports.
- Ancillary materials and training CDs were developed and sent to teachers administering the assessment.
- Optional breaks were added to give teachers a clearer idea of when to give the student a break in the test activity.
- Item language was revised for clarity and consistency with the newly developed assessments in grades 3, 5, 6, and 7.
- Items were added and deleted to help cover all standards evenly across all grades (3–8 and 10).
- The scoring rule for halting the assessment was changed from "Score every item until the student scores in level 1 or 0 for five consecutive items. Halt the administration if the student scores in level 1 or 0 for five consecutive items. Leave the remaining items blank." to "Score every item until the student scores at level 0 for three consecutive items. Stop the administration of the assessment at this point. On the following assessment session, re-administer the final three items on which the student scored a 0. If the student receives a level 0 on three consecutive items again, halt the administration of the assessment and leave the remaining items blank." Three examples were given for

this new rule. This was based on in-depth discussion with the Technical Advisory Committee (TAC) and their recommendations.

ACTIVITIES VERSUS TASKLETS:

The earlier tests, in grades 4, 8, and 10 were designed around a single activity. A series of test items were administered using this common activity. When the new tests for grades 3, 5, 6, and 7 were developed it was recommended that instead of using one activity with 25 to 35 associated items, a better approach would be to use five smaller activities with five associated items each. This allows for natural break times in the assessment, so that it can be given over a longer period of time. Using five tasklets instead of one activity also helps to minimize the negative impact associated with a student who is unusually distracted by the content of a particular tasklet can have on a student's score. For instance, in the grade eight mathematics activity, if a student has some sort of negative reaction to cake (maybe he is allergic to flour, for example), the fact that all the questions on the test are somehow related to cake may be difficult for him.

ITEM/ACTIVITY EDITING

Editors reviewed and edited the items and test activities to ensure uniform style (based on *The Chicago Manual of Style*) and adherence to sound testing principles. These principles included the stipulation that items and the test activities:

- were correct with regard to grammar, punctuation, usage, and spelling;
- were written in a clear, concise style;
- were measuring the performance indicator;
- had materials that were appropriate;
- contained unambiguous explanations for teachers as to what was required of the student;
- were written at a reading level that would allow the student to demonstrate his or her knowledge of the tested subject matter regardless of reading ability;
- exhibited high technical quality regarding psychometric characteristics;
- had appropriate scaffolding script for teachers; and

- were free of potentially insensitive content.

Items should assess only knowledge or skills that are identified as part of the domain being tested and should avoid assessing irrelevant factors. They should also be unambiguous and free of grammatical errors, potentially insensitive content or language, and other confounding characteristics. Further, items must not unfairly disadvantage test takers from particular racial, ethnic, or gender groups.

Both qualitative and quantitative analyses are conducted to ensure that Montana CRT-Alternate items meet these standards.

CHAPTER 5—DESIGN OF THE READING ASSESSMENT

READING BLUEPRINT

As indicated earlier, the framework for reading was based on Montana's reading content standards and expanded benchmarks, which identify five **content standards** that apply specifically to reading and reading comprehension. Those content standards are:

- **Reading Standard 1:** Students construct meaning as they comprehend, interpret, and respond to what they read.
- **Reading Standard 2:** Students apply a range of skills and strategies to read.
- **Reading Standard 3:** Students set goals, monitor, and evaluate their reading progress. (This standard is not measurable in a statewide assessment.)
- **Reading Standard 4:** Students select, read, and respond to print and nonprint material for a variety of purposes.
- **Reading Standard 5:** Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.

The chart below shows the standards measured at each grade level. For a complete list of all reading and mathematics test items (and the correlating standards assessed through each item) see Appendix E.

	STANDARD 1	STANDARD 2	STANDARD 3	STANDARD 4	STANDARD 5
GRADE 3	**13**	**8**	*****	**4**	**0**
GRADE 4	**9**	**9**	*****	**3**	**1**
GRADE 5	**13**	**8**	*****	**4**	**0**
GRADE 6	**13**	**7**	*****	**1**	**4**
GRADE 7	**13**	**7**	*****	**1**	**4**
GRADE 8	**10**	**10**	*****	**2**	**2**
GRADE 10	**13**	**7**	*****	**3**	**4**

*Standard 3 is not measurable in a statewide assessment.

Note: Decisions for the test blueprints were made by looking at concepts across all grades and where the focus/introduction of the other concepts occurs in general education so that students who are included in general education classrooms and activities are also working on similar expanded skills. Standards 1 and 2 for both math and reading are measured at every grade level and the other standards are measured evenly across grade spans (elementary 3–5, middle 6–8 and high school 10).

CHAPTER 6—DESIGN OF THE MATHEMATICS ASSESSMENT

MATHEMATICS BLUEPRINT

The mathematics framework was based on Montana's mathematics content standards and expanded benchmarks, which identify seven **content standards**, as shown below:

- **Mathematics Standard 1:** Problem Solving
- **Mathematics Standard 2:** Numbers and Operations
- **Mathematics Standard 3:** Algebra
- **Mathematics Standard 4:** Geometry
- **Mathematics Standard 5:** Measurement
- **Mathematics Standard 6:** Data Analysis, Statistics, and Probability
- **Mathematics Standard 7:** Patterns, Relations, and Functions

The chart below shows the standards measured at each grade level. . For a complete list of all reading and mathematics test items (and the correlating standards assessed through each item) see Appendix E.

	STANDARD 1	STANDARD 2	STANDARD 3	STANDARD 4	STANDARD 5	STANDARD 6	STANDARD 7
GRADE 3	9	10	0	10	0	0	5
GRADE 4	9	8	0	0	0	13	4
GRADE 5	8	10	5	0	10	0	0
GRADE 6	6	10	0	5	5	0	5
GRADE 7	9	10	10	0	0	5	0
GRADE 8	7	8	4	0	5	11	0
GRADE 10	5	13	7	4	0	0	3

Note: Decisions for the test blueprints were made by looking at concepts across all grades and where the focus/introduction of the other concepts occurs in general education so that students who are included in general education classrooms and activities are also working on similar expanded skills. Standards 1 and 2 for math are measured at every grade level and the other standards are measured evenly across grade spans (elementary 3–5, middle 6–8, and high school 10).

SECTION II: TEST ADMINISTRATION

CHAPTER 7—TEST ADMINISTRATION

RESPONSIBILITY FOR ADMINISTRATION

The special education teacher or someone who is certified and has worked extensively with the student and is trained in the assessment procedures administers the assessment. The test administrator may find it helpful to ask another person in the school to assist with the administration. Because this is an on-demand performance assessment, the administrator is also the scorer. This becomes a consideration with regards to reliability; the values tend to be inflated due to administrator effects. This is discussed further in Chapter 10-Reliability.

These additional persons may include but are not limited to the following:

- parent
- general education teacher
- paraprofessional
- special service provider (speech/language therapist, psychologist, occupational, or physical therapist, etc.)
- school counselor
- principal
- other educational professional

PROCEDURES

Teachers administering the CRT-Alternate were sent a training CD with an audio PowerPoint presentation to train them on implementing the test. The following are the procedures teachers were given to prepare to administer the assessment:

- View training CD and participate in question/answer sessions.
- Receive the secure *CRT-Alternate Test Booklet* from the test coordinator.

- Receive hard copy of the test activity materials, CD with test activity materials, and training CD from Gail McGregor at the Rural Institute of Disabilities, University of Montana-Missoula. Teachers may have needed to further adapt materials to meet the need of the students taking the assessment. Guidelines and examples for adapting materials were given in the "Materials" section of the test booklet and on pages 28 and 29 of the *CRT-Alternate Administration Manual*.
- Download the *CRT-Alternate Administration Manual* and scoring rubric from the OPI or Measured Progress Web site.
- Read the *CRT-Alternate Administration Manual* to become familiar with the administration and scoring directions.
- Read the *CRT-Alternate Test Booklet* to become familiar with the test activity steps and performance indicators.
- Consider how the student will access and respond to the test activity. Determine the adaptations and supports the student will need.
- Check to ensure all materials and resources needed to complete the test activity are available. For example: The grade 8 reading activity asks the student to locate the library and to identify the librarian. The reference or book area in the classroom may be substituted for the library, and someone who helps students pick a book (i.e., teacher) may be substituted for the librarian.
- Provide the assistive technologies the student needs to access the materials and respond to the test activities.
- Schedule the assessment administration session for a time and place that are optimal for student effort and focus.

TRAINING

School test coordinators were instructed to read the *Test Coordinator's Manual* prior to testing and be familiar with the instructions given in the *Test Administrator's Manual* and the *CRT-Alternate Administration Manual*. The *Test Coordinator's Manual* and the *CRT-Alternate Administration Manual* provided each school with checklists to help prepare for testing. The checklists outlined tasks to be performed before, during, and after test administration. Along with providing these checklists, the *Test Coordinator's Manual* and the *CRT-Alternate*

Administration Manual outlined the nature of the testing material being sent to each school, how to inventory the material, how to track it during administration, and how to return the material once testing was complete. It also contained information about including or excluding students. The *CRT-Alternate Administration Manual* included a checklist for the test administrators to prepare themselves, their classrooms, and their students for the administration of the test and how to return the assessment. In addition to distributing the *Test Coordinator's Manual* and *CRT-Alternate Administration Manual*, teacher-training CDs were sent to every teacher administering the CRT-Alternate. Training materials and the PowerPoint presentation were posted on the OPI's Web site. Below is a summary of the information presented in the training CD:

- Important Dates
- CRT-Alternate Overview
- Week 1 of Testing
- Eligibility for the CRT-Alternate
- Who Should Administer the CRT-Alternate
- Materials Needed for this Presentation and for Testing
- About the Tests…
- Test Booklet Organization for Grades 3, 5, 6, and 7
- Test Booklet Organization for Grades 4, 8, and 10
- Assessment Format (All Grades)
- Scoring
- Scaffolding
- Dealing with Resistance
- Scoring Rule Grades 3, 5, 6, and 7
- Scoring Rule for Grades 4, 8, and 10
- Introductory Item
- Student Evidence
- Grade-Specific Information for Administering the CRT-Alternate
- Student Response Booklet (SRB)
- Class Identification Sheet
- Student Barcode Labels
- Returning Student Materials

- Test Administration Strategies
- Test Activity Materials Grades 3, 5, 6, and 7
- Test Activity Materials Grades 4, 8, and 10
- Final Administration Hints
- Questions and Answers

To answer any questions that may not have been addressed in the training, Teachers, test administrators, and test coordinators were provided with contact information for OPI, Measured Progress, and the University of Montana-Missoula. The contact information was provided on the training CD, in the Manual, and on the memo sent out with the test materials.

SECTION III:
DEVELOPMENT AND REPORTING OF SCORES

CHAPTER 8—SCORING

SCORING THE ASSESSMENT

Teachers administer the assessment to a student one-on-one or with the help of another administrator. The teacher scores every item as it is administered using the rubric and a process called scaffolding.

USING SCAFFOLDING TO GATHER STUDENT PERFORMANCE INFORMATION

Scaffolding is a process of providing the student with the support needed to respond to the questions in the test activity. During daily instruction, many strategies are used frequently to ensure that students experience success. For example, if a student is unable to make a correct choice from a display of four pictures, the teacher reduces the complexity of the test activity by removing one of the choices. Scaffolding serves this same function and is provided so that students will experience success in completing the test activities. An important result of scaffolding is that it helps students demonstrate their knowledge and skills. These skills can be described and measured, resulting in an accurate picture of what students can do.

The scoring system in the CRT-Alternate is built on increasing amounts of scaffolding, provided only when the student does not respond or responds incorrectly. This approach is sometimes described as a “least to most” prompt hierarchy (see Chapter 3 for a description of the scaffolding-as-scoring paradigm).

Each test activity begins with items that introduce the subject and materials that will be used in the test activity. These items are scored as either a 4 (student responds accurately and with no assistance) or a 0 (student does not respond or actively resists). Items that are

scored at a level 4 or 0 may also be found further into the activity when new materials are being introduced.

After these items are scored, each subsequent item within the test activity is scored on a five-point scale 4–0, with 4 representing a correct, independent response and 1 representing a correct response that has been completely guided by the teacher. A score of 0 is used when the student does not respond or actively resists participation in the test activity. See the scoring rubric on page 33.

The scores from all items, including the introductory items and the subsequent items within the test activity, are added together to produce a raw score (or total score) for the test. The raw score is then scaled and a performance level is assigned for the content area (see Chapter 11 for details on Scaling).

A script is provided for scaffolding for each of the suggested test activities. It describes the prompts that can be used to scaffold the student to a level 3, level 2, and level 1. It may be used verbatim or modified by the teacher to meet the needs of the student. For each test item, level 1 prompting is full support from the teacher to guide the student to the correct response. Depending on the student and the test item, this may involve physically guiding the student to the correct response or some other form of support that ensures the student responds correctly.

It is critical that the test administrator deliver each item in a way that allows the student the opportunity to score at level 4. That is, assume that the student can respond independently to each item, even if that is not the usual instructional practice. The following are directions given to test administrators in order to standardize scaffolding procedures across the state:

- Follow the guidelines to observe the student demonstrating the performance required and allow adequate wait time for the student to process the information and respond without assistance. Do not repeat the questions multiple times.
- If the student does not respond or responds incorrectly, scaffold the student to level 3—“Student responds accurately when teacher clarifies, highlights important

information, or reduces the range of options to three." Again, give the student adequate wait time.

- If the student does not respond or responds incorrectly, scaffold to level 2—"Student responds accurately when teacher provides basic yes/no questions or forced choices between two options."
- If the student still does not respond with the desired behavior, scaffold to level 1—"Student is guided to correct response by teacher (e.g., modeling the correct response or providing full physical assistance)."
- If the student resists participating for an item, the test administrator will indicate a 0—"Student does not respond or actively resists."

Scaffolding is based on the amount of information the student needs to reach the correct response. If the student can respond independently (4), no further information is needed by the student. If the student does not respond accurately or independently, more information is given about the item, and the choices are reduced (3) see script in the *CRT-Alternate Test Booklet*. This funneling toward the correct response continues as the student needs more assistance—by providing specific information about the item and a forced choice between two options (2) see script in the CRT-Alternate Test Booklet, and finally, by guiding the student to the correct response (1) [see script in the *CRT-Alternate Test Booklet*]. In this way, the student is not expected to "get it" or "not get it," as in most on-demand assessments. The CRT-Alternate considers the level of assistance that students need to demonstrate their knowledge and skills and thus provides more precise information about student performance and achievement. This system is sensitive to small increments of change in student performance, an important consideration in describing the learning outcomes of students with severe disabilities.

This process must be used systematically with <u>each</u> item identified for scoring within the test activity. The intent is to give the student every opportunity to perform independently on each item. Scaffolding examples are given in the *CRT-Alternate Administration Manual*.

The use of different levels of assistance required during administration/scoring will increase item intercorrelations and overall test reliability. The effects of scaffolding and other scoring analysis are further discussed in Chapter 10-Reliability.

SCORING RUBRIC

Each test activity begins with introductory items. Only rubric levels of 4 and 0 are used to score these introductory items. Items that are scored at a level 4 and 0 may also be found further into the assessment when new materials are being introduced. All five levels of the rubric are used to score remaining items. Teachers administering the assessment are encouraged to have the rubric available as a reference when giving the test. The five levels of the rubric are on the following page.

Montana Alternate Assessment Scoring Guide

Performance (independence and accuracy)

Used to score every item during the structured observation test activity.

4	3	2	1	0
Student responds accurately and with no assistance.	Student responds accurately when teacher clarifies, highlights important information or reduces the range of options to three.	Student responds accurately when teacher provides basic yes/no questions or forced choices between two options.	Student is guided to correct response by teacher (e.g., modeling the correct response or providing full physical assistance).	Student does not respond or actively resists.

INTER-RATER-RELIABILITY

For the 2006 administration, OPI has designed a study to review Inter Rater Reliability on the Alternate Assessment. A group of five highly qualified administrators will observe and score seven test administrations (for a total of thirty-five students). The scoring will be double blind, meaning that the OPI administrators will not communicate their scores to the official test administrator. The two scores from the same administration will be analyzed and compared for accuracy.

SCORING RULES

The instructions and examples illustrate the following rules for scoring:

- Begin with the introductory items and score 4 or 0.
- Use the full scale of 4, 3, 2, 1, and 0 to score the test activity items. Start with level 4 and work systematically through the scaffolding system for every performance indicator as necessary, based on the student's response.
- Allow for appropriate wait time as you scaffold through each level of the scoring rubric.
- Do not repeat questions or directions numerous times.
- Visual, verbal, gestural, and physical cues are allowed in each level except 4.
- Record only one score for each item.
- Score 0 only if the student does not respond or actively resists.
- Halt the administration if the student is showing a pattern of resisting, is becoming fatigued, or is not participating in any way, and resume testing at another time.
- Score every item until the student scores at level 0 for three consecutive items. Stop the administration of the assessment at this point. At the following assessment session, re-administer the final three items on which

the student scored a 0. If the student receives a level 0 on three consecutive items again, halt the administration of the assessment and leave the remaining items blank.

MACHINE-SCORED ITEMS

Once the 2006 test booklets had been logged in, identified with appropriate scannable, preprinted school information sheets, examined for extraneous materials, and batched, they were moved into the scanning area. For all student response booklets (and other forms that required imaging/scanning), this was the last step in the processing loop in which the documents themselves were handled.

At that point, 100 percent of the student response documents and other scannable information necessary to produce the required reports had been captured and converted into an electronic format, including all student identification and demographics, and digital image clips of short-answer and constructed-response student responses. The digital image clip information allowed Measured Progress to replicate student responses on the readers' monitors just as they had appeared on the originals. From that point on, the entire process—data processing, data analysis, and reporting—was accomplished without further reference to the originals.

The first step in that conversion was the removal of the booklet bindings so the individual pages could pass through the scanners one at a time. Once cut, the sheets were put back in their proper boxes and placed in storage until needed for the scanning/imaging process.

Customized scanning programs for all scannables were prepared to selectively read the student response booklets and to electronically format the scanned

information according to predetermined requirements. Any information that had been designated time-critical or process-critical was handled first.

In addition to numerous real-time quality control checks, duplex read, a transport printer that prints a unique identifying number on each sheet of each booklet, and online editing capability, the 5000i scanners offer features that make them compatible with Internet technology.

SCANNING QUALITY CONTROL

NCS scanners are equipped with many built-in safeguards that prevent data errors. The scanning hardware is continually monitored for conditions that will cause the machine to shut down if standards are not met. It will display an error message and prevent further scanning until the condition is corrected. The areas monitored include document page and integrity checks, user-designed online edits, and many internal checks of electronic functions.

Before every scanning shift begins, Measured Progress operators perform a daily diagnostic routine. This is yet another step to protect data integrity and one that has been done faithfully for the many years that Measured Progress has been involved in production scanning. In the rare event that the routine detects a photocell that appears to be out of range, Measured Progress will calibrate that machine and perform the test again. If the read is still not up to standard, Measured Progress will call for assistance from our field service engineer.

As a final safeguard, spot checks of scanned files, bubble by bubble and image by image, were routinely made throughout scanning runs. The result of these precautions, from the original layout of the scanning form to the daily vigilance of our operators, was a scan error rate well below 1 per 1000.

ELECTRONIC DATA FILES

Once the data had been entered and the scanning logs and other paperwork completed, the booklets themselves were put into storage (where they stayed for at least 180 days beyond the close of the fiscal year). When it was determined the files were complete and accurate, those files were duplicated electronically and made available for many other processing options.

CHAPTER 9—ITEM ANALYSES

As noted in Brown (1983), "A test is only as good as the items it contains." A complete evaluation of a test's quality must include an evaluation of each item. Both the *Standards for Educational and Psychological Testing* and the *Code of Fair Testing Practices in Education* include standards for identifying quality items. Items should assess only knowledge or skills that are identified as part of the domain being tested and should avoid assessing irrelevant factors. They should also be unambiguous and free of grammatical errors, potentially insensitive content or language, and other confounding characteristics. Further, items must not unfairly disadvantage test takers from particular racial, ethnic, or gender groups.

Both qualitative and quantitative analyses are conducted to ensure that Montana CRT-Alternate items meet these standards. Qualitative analyses are described in earlier sections of this report; this section focuses on the more quantitative evaluations. The statistical evaluations discussed are: difficulty indices, item-test correlations, and differential item functioning (DIF) analyses. However, because of the small sample sizes taking the test, it was not feasible to calculate DIF statistics for the Montana CRT-Alternate. The item analyses presented here are based on the statewide administration of the Montana CRT-Alternate in spring 2006. Table 1 gives the total number of students who participated in each assessment, by grade and content area.

Table 1

Number of Students Participating in Each Assessment

Grade	Content Area	N
3	Mathematics	98
	Reading	99
4	Mathematics	79
	Reading	79
5	Mathematics	105
	Reading	104
6	Mathematics	80
	Reading	79
7	Mathematics	70
	Reading	70
8	Mathematics	86
	Reading	87
10	Mathematics	102
	Reading	103

DIFFICULTY INDICES (*P*)

All tasks were evaluated in terms of item difficulty according to standard classical test theory practices. “Difficulty” was defined as the average proportion of points achieved on an item and was measured by obtaining the average score on an item and dividing by the maximum score for the item. Tasks are scored polytomously, where a student can achieve a score of 0, 1, 2, 3, or 4 for the item. By computing the difficulty index as the average proportion of points achieved, the items are placed on a scale that ranges from 0.0 to 1.0. Although this index is traditionally described as a measure of difficulty, it is properly interpreted as an “easiness index” because larger values indicate easier items.

An index of 0.0 indicates that all students received no credit for the item, and an index of 1.0 indicates that all students received full credit for the item. Items that have either a very high or very low difficulty index are considered to be potentially problematic because they are either so difficult that few students answer

correctly or so easy that nearly all students answer correctly. In either case, such items should be reviewed for appropriateness for inclusion on the assessment. If an assessment were comprised entirely of very easy or very hard items, all students would receive nearly the same scores, and the assessment would not be able to differentiate high-ability students from low-ability students. However, it is important to note that the purpose of alternate assessments such as the Montana CRT-Alternate is generally not to differentiate among students, but instead to provide evidence as to how students are progressing relative to performance standards. Therefore, generally accepted criteria regarding item statistics are not applicable to the Montana CRT-Alternate.

ITEM-TEST CORRELATIONS (ITEM DISCRIMINATION)

A desirable feature of an item is that higher-ability students perform better on the item than lower-ability students. The correlation between student performance on a single item and total test score is a commonly used measure of this item characteristic. Within classical test theory, the item-test correlation is referred to as the item's discrimination because it indicates the extent to which successful performance on an item discriminates between high and low scores on the test. The discrimination index used to evaluate Montana CRT-Alternate tasks was the Pearson product-moment correlation. The theoretical range of this statistic is –1 to +1.

Discrimination indices can be thought of as measures of how closely an item assesses the same knowledge and skills assessed by other items contributing to the criterion total score. That is, the discrimination index can be thought of as a measure of construct consistency. In light of this interpretation, the selection of an appropriate criterion total score is crucial to the interpretation of the discrimination index. For the Montana CRT-Alternate, the test total score was used as the criterion score.

SUMMARY OF ITEM ANALYSIS RESULTS

A summary of the item difficulty and item discrimination statistics for each grade/content combination is presented in Table 2. The mean difficulty values shown in Table 2 indicate that, overall, students performed well on the items in the Montana CRT-Alternate. In interpreting these values, it is important to note that item scores lower than 2 are fairly rare on the CRT-Alternate, and a score of 0 is awarded only if the student refuses to respond. These aspects of the item score scale should be considered when evaluating the difficulty values presented in Table 2. In contrast, difficulty values for assessments designed for the general population (i.e., regular, rather than alternate assessments) tend to be in the 0.4 to 0.7 range for the majority of items.

Also shown in Table 2 are the mean discrimination values. A couple of factors should be considered when interpreting these values. First, all items on the CRT-Alternate are polytomously scored. In general, polytomous items will tend to have higher discrimination values than dichotomous (e.g., multiple-choice) items because they are less impacted by restriction of range. Second, the item score scale awards points based on the extent to which students require assistance to complete the task. Because students who require assistance with one task are more likely to require assistance on other tasks, discrimination values will be more difficult for items scored in this way.

As with the item difficulty values, because the nature and use of this assessment are different than those for general assessments and because very few guidelines exist as criteria for interpreting these values for alternate assessments, the statistics presented in Table 2 should be interpreted with caution.

Table 2

Item Analysis

Grade	Content Area	Difficulty		Discrimination	
		Mean	SD	Mean	SD
3	Mathematics	0.81	0.10	0.74	0.09
	Reading	0.84	0.10	0.65	0.14
4	Mathematics	0.77	0.12	0.69	0.13
	Reading	0.87	0.09	0.62	0.12
5	Mathematics	0.81	0.09	0.72	0.12
	Reading	0.82	0.11	0.58	0.16
6	Mathematics	0.81	0.10	0.76	0.14
	Reading	0.84	0.10	0.75	0.12
7	Mathematics	0.75	0.11	0.79	0.10
	Reading	0.81	0.11	0.68	0.14
8	Mathematics	0.74	0.14	0.62	0.17
	Reading	0.88	0.08	0.57	0.15
10	Mathematics	0.82	0.10	0.69	0.21
	Reading	0.87	0.08	0.65	0.13

DIFFERENTIAL ITEM FUNCTIONING

Due to very small sample sizes (70 to 105 students in each grade/content combination), it is unreasonable to calculate DIF statistics for the Montana CRT-Alternate. That is, Type I error rates would be unreasonably high and would result in incorrect conclusions regarding the functioning of the items between reference and focal groups. Thus, DIF statistics are not included as part of this technical report.

CHAPTER 10—RELIABILITY

Although an individual item's performance is an important focus for evaluation, a complete evaluation of an assessment must also address the way items function together and complement one another. Tests that function well provide an accurate assessment of the student's level of achievement. Unfortunately, no test can do this perfectly. A variety of factors can contribute to a given student's score being either higher or lower than his or her true achievement. Collectively, these extraneous factors that impact a student's score are referred to as measurement error. Any assessment includes some amount of measurement error. This is true of academic assessments. No assessment can measure students perfectly accurately—some students will receive scores that underestimate their true achievement, and other students will receive scores that overestimate their true achievement. When tests have a high amount of measurement error, student scores are very unstable. Students with high achievement may get low scores, or vice versa. Consequently, one cannot reliably tell a student's true level of achievement with such a test. Assessments that have less measurement error (i.e., errors made are small on average and student scores on such a test will consistently represent their achievement) are described as reliable.

There are a number of ways to estimate an assessment's reliability. One possible approach is to give the same test to the same students at two different points in time. If students receive the same scores on each test, then the extraneous factors affecting performance are small and the test is reliable (this is referred to as test-retest reliability). A potential problem with this approach is that students may remember items from the first administration or may have gained or lost knowledge or skills in the interim between the two administrations. A solution to the "remembering items" problem is to give a different, but parallel test at the second administration. If student scores on each test correlate highly, the test is considered reliable. This method is known as alternate-forms reliability because an alternate form of the test is used in each administration. However, this

approach does not address the problem that students may have gained or lost knowledge or skills in the interim between the two administrations. In addition, the practical challenges of developing and administering parallel forms generally preclude the use of parallel forms reliability indices. One way to address these problems is to split the test in half and then correlate students' scores on the two half-tests; this in effect treats each half-test as a complete test. By doing this, the problems associated with an intervening time interval and of creating and administering two parallel forms' of the test are alleviated. This is known as a split-half estimate of reliability. If the two half-test scores correlate highly, items on the two half-tests must be measuring very similar knowledge or skills. This is evidence that the items complement one another and function well as a group. This also suggests that measurement error will be minimal.

The split-half method requires a judgment regarding the selection of which items contribute to which half-test score. This decision may have an impact on the resulting correlation; different splits will give different estimates of reliability. Cronbach (1951) provided a statistic, α, that avoids this concern about the split-half method. Cronbach's α gives an estimate of the average of all possible splits for a given test. Cronbach's α is often referred to as a measure of internal consistency because it provides a measure of how well all the items in the test measure one single underlying ability. Cronbach's α is computed using the following formula:

$$\alpha = \frac{n}{n-1}\left[1 - \frac{\sum_{i=1}^{n}\sigma^2\left(Y_i\right)}{\sigma_x^2}\right]$$

where *i* indexes the item,
n is the total number of items,
$\sigma^2\left(Y_i\right)$ represents individual item variance, and
σ_x^2 represents the total test variance.

RELIABILITY RESULTS

Table 3 presents Cronbach's α coefficient for each subject area (reading and mathematics) and each grade level. The values in Table 3 are all greater than or equal to 0.89, indicating that these tests have a high level of reliability. Note, however, that these high values do not necessarily indicate that the CRT-Alternate is "better" than general assessments, which tend to have reliabilities ranging from around 0.80 to around 0.95. There are several factors that may contribute to these high values. First, because the CRT-Alternate is individually administered, the reliability values are likely to be inflated due to administrator effects. In other words, the task scores awarded by the administrator may be influenced by his or her overall sense of the student's level of ability or proficiency, which may result in task scores that are more homogeneous than if they were based strictly on the student's performance on each task. Second, the reliabilities are artificially inflated due to tasks being "bundled" together within activities. Items that are bundled together will be more highly correlated, which will increase test reliability. Finally, the use of level of assistance required in the item scoring guide (as described above) will also increase item inter correlations and overall test reliability.

Table 3

Reliability Analysis

Grade	Content Area	Reliability
3	Mathematics	0.97
	Reading	0.94
4	Mathematics	0.95
	Reading	0.89
5	Mathematics	0.96
	Reading	0.91
6	Mathematics	0.97
	Reading	0.95
7	Mathematics	0.98
	Reading	0.94

8	Mathematics	0.95
	Reading	0.89
10	Mathematics	0.96
	Reading	0.93

RELIABILITY OF PERFORMANCE LEVEL CATEGORIZATION

All test scores contain measurement error; thus, classifications based on test scores are also subject to measurement error. After the performance levels were specified and students were classified into those levels, empirical analyses were conducted to determine the statistical accuracy and consistency of the classifications. For the Montana CRT-Alternate, students are classified into one of four performance levels: Novice (N), Nearing Proficiency (NP), Proficient (P), or Advanced (A). This section of the report explains the methodologies used to assess the reliability of classification decisions, and results are given.

Accuracy

Accuracy refers to the extent to which decisions based on test scores match decisions that would have been made if the scores did not contain any measurement error. Accuracy must be estimated because errorless test scores do not exist.

Consistency

Consistency measures the extent to which classification decisions based on test scores match the decisions based on scores from a second, parallel form of the same test. Consistency can be evaluated directly from actual responses to test items if two complete, parallel forms of the test are given to the same group of students. This is usually impractical, especially on lengthy tests. To overcome this issue, techniques have been developed to estimate both accuracy and consistency of classification decisions based on a single administration of a test. The technique developed by Livingston and Lewis (1995) was used for the

Montana CRT-Alternate because it is a flexible approach that is appropriate for tests that are composed entirely of polytomous items.

Calculating Accuracy

All the accuracy and consistency estimation techniques described below make use of the concept of "true scores" in the sense of classical test theory. A true score is the score that would be obtained on a test that had no measurement error. It is a theoretical concept that cannot be observed, although it can be estimated. In the Livingston and Lewis method, the estimated true score distribution is used to estimate the proportion of students in each "true" performance level. After various technical adjustments (described in Livingston and Lewis, 1995), a 4×4 contingency table was created for each content area and grade level. The *i,j* entry within an accuracy table represents the estimated proportion of students whose true score fell into performance level *i* and whose observed score fell into performance level *j* on the Montana CRT-Alternate. Overall accuracy, which is the proportion of students whose true and observed performance levels match one another, is the sum of the numbers on the diagonal of the accuracy table.

Calculating Consistency

To estimate consistency, the true scores are used to estimate the joint distribution of classifications on two independent, parallel test forms. After statistical adjustments (see Livingston and Lewis, 1995), a new 4×4 contingency table was created for each content area and grade level. It shows the proportion of students who would be classified into each performance level by the two (hypothetical) parallel test forms. That is, the *i,j* entry in a consistency table represents the estimated proportion of students whose observed score on the first form would fall into performance level *i* and whose observed score on the second form would fall into performance level *j*. Overall consistency, which is the proportion of students classified into exactly the same performance level by the

two forms of the test, is the sum of the numbers on the diagonal of this new contingency table.

Kappa

Another way to measure consistency is to use Cohen's (1960) coefficient κ (kappa), which assesses the proportion of consistent classifications after removing the proportion of consistent classifications that would be expected by chance. Cohen's κ can be used to evaluate the classification consistency of a test from two parallel forms of the test. The two forms in this case were the hypothetical parallel forms used by the Livingston and Lewis method. Because κ is corrected for chance, the values of κ are lower than other consistency estimates.

Results of Accuracy, Consistency, and Kappa Analyses

Summaries of the accuracy and consistency analyses are provided in Tables 4 through 17. The first section of each table shows the overall accuracy and consistency indices, as well as κ. The overall index is the sum of the diagonal elements of the appropriate contingency table and includes κ the version of the overall consistency value that has been corrected for chance. As expected, the values of κ reported in Tables 9-9 through 9-22 are lower than the overall consistency estimates.

The second section of each table shows accuracy and consistency values conditional upon performance level. In each case, the denominator is the number of students who are associated with a given performance level. For example, the conditional accuracy value is 0.7872 for the Proficient level for grade 4 math. This figure indicates that among the students whose true scores placed them in the Proficient level, 78.72% of them would be expected to be placed in Proficient if they were categorized according to their observed scores. The corresponding consistency value of 0.7548 indicates that 75.48% of students with observed

scores in the Proficient performance level would be expected to score in Proficient again if a second, parallel test form were used.

For certain tests, concern may be greatest regarding decisions made about a particular threshold. For example, if a college gave credit to students who achieved an Advanced Placement test score of four or five, but not one, two, or three, one might be interested in the accuracy of the dichotomous decision of below four versus four or above. The third section of the summary tables shows information at each of the cut points. These values indicate the accuracy and consistency of the dichotomous decisions, either above or below the associated cut point. In addition, the false positive and false negative accuracy rates are also provided. These values are estimates of the proportion of students who were categorized above the cut when their true score would place them below the cut (false positive), and vice versa.

TABLE 4
ACCURACY AND CONSISTENCY — GRADE 3 MATH

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8233		0.7710		0.6841
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.9206		0.9033
	Nearing Proficiency		0.6626		0.5634
	Proficient		0.6602		0.5941
	Advanced		0.9330		0.8517
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9591	0.0238	0.0171	0.9432
	NP : P	0.9467	0.0338	0.0195	0.9273
	P : A	0.9169	0.0623	0.0208	0.8958

TABLE 5
ACCURACY AND CONSISTENCY — GRADE 4 MATH

Accuracy and Consistency of Classification Indices			
Overall Indices	**Accuracy**	**Consistency**	**Kappa (κ)**
	0.8124	0.7546	0.6576
Indices Conditional on Level		**Accuracy**	**Consistency**
	Novice	0.8811	0.8487

	Nearing Proficiency		0.5954		0.4854
	Proficient		0.7872		0.7548
	Advanced		0.9207		0.8070
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9529	0.0264	0.0207	0.9345
	NP : P	0.9413	0.0352	0.0235	0.9188
	P : A	0.9170	0.0650	0.0180	0.8943

TABLE 6
ACCURACY AND CONSISTENCY — GRADE 5 MATH

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8098		0.7595		0.6639
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.9019		0.8788
	Nearing Proficiency		0.4907		0.3836
	Proficient		0.7436		0.7102
	Advanced		0.9256		0.8198
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9528	0.0272	0.0200	0.9345
	NP : P	0.9442	0.0340	0.0218	0.9232
	P : A	0.9088	0.0720	0.0192	0.8878

TABLE 7
ACCURACY AND CONSISTENCY — GRADE 6 MATH

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8355		0.7887		0.7027
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.9113		0.8873
	Nearing Proficiency		0.8065		0.7562
	Proficient		0.6041		0.5304
	Advanced		0.9436		0.8739
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9712	0.0161	0.0127	0.9598
	NP : P	0.9484	0.0332	0.0183	0.9301
	P : A	0.9151	0.0637	0.0212	0.8945

TABLE 8
ACCURACY AND CONSISTENCY— GRADE 7 MATH

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8836		0.8428		0.7823
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.9243		0.9017
	Nearing Proficiency		0.8072		0.7394
	Proficient		0.8307		0.8012
	Advanced		0.9512		0.8958
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9751	0.0136	0.0113	0.9651
	NP : P	0.9654	0.0200	0.0146	0.9518
	P : A	0.9431	0.0408	0.0161	0.9259

TABLE 9
ACCURACY AND CONSISTENCY— GRADE 8 MATH

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8206		0.7552		0.6656
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8798		0.8421
	Nearing Proficiency		0.7043		0.6082
	Proficient		0.7133		0.6255
	Advanced		0.9310		0.8684
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9529	0.0255	0.0216	0.9343
	NP : P	0.9370	0.0371	0.0258	0.9125
	P : A	0.9304	0.0462	0.0234	0.9048

TABLE 10
ACCURACY AND CONSISTENCY— GRADE 10 MATH

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8353		0.7825		0.6873
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8966		0.8706
	Nearing Proficiency		0.7198		0.6331
	Proficient		0.6371		0.5539
	Advanced		0.9508		0.8921
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9631	0.0210	0.0158	0.9487
	NP : P	0.9463	0.0335	0.0202	0.9263
	P : A	0.9253	0.0541	0.0205	0.9027

TABLE 11
ACCURACY AND CONSISTENCY — GRADE 3 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8154		0.7629		0.6480
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8500		0.8079
	Nearing Proficiency		0.7344		0.6593
	Proficient		0.6401		0.5793
	Advanced		0.9492		0.8764
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9675	0.0182	0.0144	0.9550
	NP : P	0.9434	0.0358	0.0208	0.9230
	P : A	0.9041	0.0742	0.0217	0.8813

TABLE 12
ACCURACY AND CONSISTENCY — GRADE 4 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.7390		0.6916		0.5167
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.7940		0.7397
	Nearing Proficiency		0.5190		0.4225
	Proficient		0.5011		0.4383
	Advanced		0.9374		0.8454
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9517	0.0275	0.0208	0.9341
	NP : P	0.9202	0.0516	0.0282	0.8938
	P : A	0.8600	0.1118	0.0282	0.8351

TABLE 13
ACCURACY AND CONSISTENCY — GRADE 5 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.7874		0.7250		0.5785
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8051		0.7316
	Nearing Proficiency		0.6987		0.6157
	Proficient		0.5673		0.4792
	Advanced		0.9355		0.8652
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9650	0.0179	0.0171	0.9512
	NP : P	0.9249	0.0459	0.0293	0.8976
	P : A	0.8949	0.0751	0.0299	0.8627

TABLE 14
ACCURACY AND CONSISTENCY — GRADE 6 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8439		0.7936		0.6829
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8655		0.8260
	Nearing Proficiency		0.6861		0.5891
	Proficient		0.7155		0.6587
	Advanced		0.9553		0.9006
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9695	0.0168	0.0137	0.9575
	NP : P	0.9530	0.0281	0.0189	0.9353
	P : A	0.9213	0.0575	0.0212	0.8986

TABLE 15
ACCURACY AND CONSISTENCY — GRADE 7 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8319		0.7775		0.6554
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8386		0.7936
	Nearing Proficiency		0.6619		0.5621
	Proficient		0.6894		0.6169
	Advanced		0.9519		0.8988
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9643	0.0200	0.0157	0.9506
	NP : P	0.9475	0.0317	0.0208	0.9279
	P : A	0.9197	0.0569	0.0234	0.8947

TABLE 16
ACCURACY AND CONSISTENCY — GRADE 8 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.7373		0.6676		0.4210
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8559		0.8282
	Nearing Proficiency		0.4634		0.3475
	Proficient		0.4025		0.2793
	Advanced		0.8396		0.7943
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9673	0.0197	0.0129	0.9553
	NP : P	0.9478	0.0314	0.0208	0.9283
	P : A	0.8108	0.0907	0.0984	0.7507

TABLE 17
ACCURACY AND CONSISTENCY — GRADE 10 READING

Accuracy and Consistency of Classification Indices					
Overall Indices	**Accuracy**		**Consistency**		**Kappa (κ)**
	0.8163		0.7654		0.6187
Indices Conditional on Level			**Accuracy**		**Consistency**
	Novice		0.8387		0.7945
	Nearing Proficiency		0.5643		0.4579
	Proficient		0.6371		0.5668
	Advanced		0.9514		0.8921
Indices for Dichotomous Decisions Around Cut Points		**Accuracy**			**Consistency**
		Accuracy	False Positives	False Negatives	
	N : NP	0.9636	0.0205	0.0159	0.9497
	NP : P	0.9458	0.0330	0.0212	0.9259
	P : A	0.9051	0.0698	0.0250	0.8794

CHAPTER 11—SCALING

TRANSLATING RAW SCORES TO SCALED SCORES AND PERFORMANCE LEVELS

Montana CRT-Alternate scores in each content area are reported on a scale that ranges from 200 to 300. Students' raw scores, or total number of points, on the Montana CRT-Alternate tests are translated to scaled scores using a data analysis process called scaling. Scaling simply converts raw points from one scale to another. In the same way that the same temperature can be expressed on either the Fahrenheit or Celsius scales and the same distance can be expressed either in miles or kilometers, student scores on the Montana CRT-Alternate tests could be expressed as raw scores (i.e., the number correct) or scaled scores. Scaled scores supplement the Montana CRT-Alternate performance-level results by providing information about the position of a student's results within a performance level. School- and district-level scaled scores are calculated by computing the average of student-level scaled scores.

It is important to note that converting raw scores to scaled scores does not change the students' performance-level classifications. Given the relative simplicity of raw scores, it is fair to ask why scaled scores are used in Montana CRT-Alternate reports instead of raw scores. Foremost, scaled scores offer the advantage of simplifying the reporting of results across content areas, grade levels, and subsequent years. Because the standard-setting process typically results in different cut scores across content areas on a raw score basis, it is useful to transform these raw cut scores into a scale that is more consistent and easily interpretable. For the Montana CRT-Alternate, a score of 225 is the cut score between the Novice and Nearing Proficiency performance levels. This is true regardless of the content area, grade, or year one may be concerned with. If one were to use raw scores, the raw cut score between Novice and Nearing Proficiency may be, for example, 35 in mathematics at grade 8, but 33 in mathematics at grade 10, or 36 in reading at grade 8. Using scaled scores greatly simplifies the task of understanding how a student performed.

Raw score cut points for the Montana CRT-Alternate were established via standard setting in July 2006. Details of the standard setting are documented in the standard setting report, which is included in Appendix C. Once the 2006 raw score cut points were determined, the next step was to calculate the transformation coefficients that would be used to place students' raw scores onto the score scale used for reporting. As previously stated, student scores on the Montana CRT-Alternate are reported in integer values from 200 to 300, with three scores representing cut scores on each assessment. Two of the three cut points (Novice/Nearing Proficiency and Nearing Proficiency/Proficient) were pre-set at 225 and 250, respectively. The third cut point, between Proficient and Advanced, was allowed to vary across tests, depending on where the raw score cuts were placed. Allowing the upper cut to float results in a single conversion equation for each test, which simplifies interpretation of scaled scores and their summary statistics. Table 18 presents the scaled score range for each performance level in each grade/content area combination.

Table 18

Scaled Score Ranges

Grade	Content Area	Scaled Score Range for each Performance Level			
		Novice	Nearing Proficiency	Proficient	Advanced
3	Mathematics	200–224	225–249	250–268	269–300
	Reading	200–224	225–249	250–264	265–300
4	Mathematics	200–224	225–249	250–294	295–300
	Reading	200–224	225–249	250–270	271–300
5	Mathematics	200–224	225–249	250–296	297–300
	Reading	200–224	225–249	250–262	263–300
6	Mathematics	200–224	225–249	250–257	258–300
	Reading	200–224	225–249	250–274	275–300
7	Mathematics	200–224	225–249	250–274	275–300
	Reading	200–224	225–249	250–276	277–300
8	Mathematics	200–224	225–249	250–272	273–300
	Reading	200–224	225–249	250–268	269–300
10	Mathematics	200-224	225-249	250-264	265-300
	Reading	200-224	225-249	250-277	278-300

The scaled scores are obtained by a simple linear transformation of the raw scores using the values of 225 and 250 on the scaled score metric and the associated 2006

raw score cut points to define the transformation. The scaling coefficients were calculated using the following formulae:

$$b = 225 - m(x_1)$$
$$b = 250 - m(x_2)$$
$$m = \frac{225 - 250}{x_1 - x_2}$$

where *m* is the slope of the line providing the relationship between the raw and scaled scores, b is the intercept, x_1 is the cut score on the raw score metric for the Novice/Nearing Proficiency cut, and x_2 is the cut score on the raw score metric for the Nearing Proficiency/Proficient cut. The raw score cutpoints (x_1 and x_2) were determined in the standard-setting meeting held in June 2006 (see Appendix C for the standard setting report). Scaled scores were then calculated using the following linear transformation:

$$ss = m(x) + b$$

where *x* represents a student's raw score. The values obtained using this formula were rounded to the nearest integer and truncated, as necessary, such that no student received a score below 200 or higher than 300.

CHAPTER 12—REPORTING

The CRT-Alternate assessments were designed to measure student performance against Montana's content standards and expanded benchmarks. Consistent with this purpose, results on the CRT-Alternate were reported in terms of performance levels that describe student performance in relation to these established state standards. There are four performance levels: Advanced, Proficient, Nearing Proficiency, and Novice. (CRT-Alternate performance level descriptors, scaled score ranges, and raw scores are described in greater detail in Appendix D.) Students receive a separate performance-level classification (based on total scaled score) in each content area.

School- and system-level results are reported as the number and percentage of students attaining each performance level at each grade level tested. Disaggregations of students are also reported at the school and system levels. The CRT-Alternate reports are

- Student Reports;
- Class Roster and Item-Level Reports;
- School Summary Reports; and
- System Summary Reports.

"Decision Rules" were formulated in late spring 2006 by OPI and Measured Progress to identify students during the reporting process who were to be excluded from school and system-level reports.

State summary results were provided to OPI on confidential CDs and via a secure Web site. The report formats (shells) are included in Appendix F. These reports were shipped to system test coordinators on or before September 15, 2006, for distribution to schools within their respective systems/districts. System test coordinators and teachers were also provided with copies of the *Guide to Interpreting the 2006 Criterion-Referenced Test and CRT-Alternate Assessment Reports* to assist them in understanding the

connection between the assessment and the classroom. The guide provides information about the assessment and the use of assessment results.

CHAPTER 13—VALIDITY SUMMARY

The purpose of this manual is to describe several technical aspects of the CRT-Alternate in an effort to contribute to the accumulation of validity evidence to support CRT-Alternate score interpretations. Because the interpretations of test scores are evaluated for validity and not the test itself, this manual presents documentation to substantiate intended interpretations (AERA, 1999). Each of the chapters in this manual contributes important information to the validity argument by addressing one or more of the following aspects of the CRT-Alternate: test development, test alignment, test administration, scoring, item analyses, reliability, scaling, performance levels, and reporting.

The CRT-Alternate assessments are based on and aligned to Montana's content standards and expanded benchmarks in reading and mathematics. Intended inferences from the CRT-Alternate results are about student achievement on Montana's reading and mathematics content standards and expanded benchmarks, and these achievement inferences are meant to be useful for program and instructional improvement and as a component of school accountability.

The *Standards for Educational and Psychological Testing* (1999) provides a framework for describing sources of evidence that should be considered when constructing a validity argument. These sources include evidence based on the following five general areas: test content, response processes, internal structure, relationship to other variables, and consequences of testing. Although each of these sources may speak to a different *aspect* of validity, they are not distinct *types* of validity. Instead, each contributes to a body of evidence about the comprehensive validity of score interpretations.

A measure of test content validity is to determine how well the assessment tasks represent the curriculum and standards for each subject and grade level. This is informed by the item development process, including how the test blueprints and test

items align to the curriculum and standards. Viewed through this lens provided by the content standards, evidence based on test content was extensively described in chapters 2 through 6. Item alignment with Montana content standards; item bias, sensitivity, and content appropriateness review processes; adherence to the test blueprint; use of standardized administration procedures; and appropriate test administration training are all components of validity evidence based on test content. As discussed earlier, all CRT-Alternate test questions are aligned by Montana educators to specific Montana content standards and undergo several rounds of review for content fidelity and appropriateness. Finally, tests are administered according to state-mandated standardized procedures, and all test administrators are required to review the training CD.

The scoring information in Chapter 7 describes the steps taken to train the teachers administering the assessment on scoring procedures, as well as quality control procedures related to scanning. In order to obtain additional validity evidence, it would be helpful to conduct a study in which a percentage of teachers administering the assessment would be videotaped to confirm validity of administration and scoring.

Evidence based on internal structure is presented in the discussions of item analyses and reliability in Chapters 9 and 10. Technical characteristics of the internal structure of the assessments are presented in terms of classical item statistics (item difficulty, item-test correlation) and reliability coefficients. In general, item difficulty and discrimination indices were in acceptable and expected ranges. Very few items were answered correctly at near-chance or near-perfect rates. Similarly, the positive discrimination indices indicate that most items were assessing consistent constructs, and students who performed well on individual items tended to perform well overall.

Evidence based on the consequences of testing is addressed in the scaling and reporting information in Chapters 11 and 12, as well as in the test interpretation guide, which is a separate document that is referenced in the discussion of reporting. Each of these chapters speaks to the efforts undertaken to promote accurate and clear

information provided to the public regarding test scores. Scaled scores offer the advantage of simplifying the reporting of results across content areas, grade levels, and subsequent years. Performance levels provide users with reference points for mastery at each grade level, which is another useful and simple way to interpret scores. Several different standard reports are provided to stakeholders. Additional evidence of the consequences of testing could be supplemented with broader investigation of the impact of testing on student learning. In particular, studies of intended and unintended consequences of the assessment, either positive or negative, would supplement validity evidence related to test use.

To further support the validity argument, additional studies to provide evidence regarding the relationship of CRT-Alternate results to other variables include the extent to which scores from the CRT-Alternate assessments converge with other measures of similar constructs, and the extent to which they diverge from measures of different constructs. Relationships among measures of the same or similar constructs can sharpen the meaning of scores and appropriate interpretations by refining the definition of the construct.

The evidence presented in this manual supports inferences of student achievement on the content represented in the Montana content standards for reading and mathematics for the purposes of program and instructional improvement and as a component of school accountability.

SECTION IV: REFERENCES

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SECTION V: APPENDICES

APPENDIX A

CRT ALTERNATE ASSESSMENT ADVISORY COMMITTEE MEMBERS

Kim Allen	Great Falls, MT
Nancy Anderson	Great Falls, MT
Susan Gregory	Billings, MT
Joanne Hallock	Fort Peck, MT
Shaun Harrington	Billings, MT
Carol Korn	Livingston, MT
Joyce Silverstone	Dixon, MT
Karla Wohlwend	Havre, MT

APPENDIX B

TECHNICAL ADVISORY COMMITTEE

2006 TECHNICAL ADVISORY COMMITTEE (TAC) MEMBERS				
FIRST NAME	**LAST NAME**	**POSITION**	**DEPARTMENT**	**ORGANIZATION**
Art	Bangert, Ph.D.	Assistant Professor	Adult and Higher Education	Montana State University
Susan	Brookhart, Ph.D.	President		Brookhart Enterprises, LLC
Ellen	Forte, Ph.D.	President		edCount, LLC
Michael	Kozlow, Ph.D.	Program Director	Assessment Program	Northwest Regional Educational Lab
Scott	Marion, Ph.D.	Vice President		Center for Assessment
Stanley	Rabinowitz, Ph.D.	Program Director	Assessment & Standards Development Services	WestEd
Stephen	Sireci, Ph.D.	Professor		University of Massachusetts Amherst

APPENDIX C

STANDARD SETTING REPORT AND EVALUATION SUMMARIES

Montana CRT-Alternate

Standard Setting Report
June 20-22, 2006
Helena, MT

Overview of Standard Setting Meeting

The standard setting meeting held to establish cut scores in Reading and Mathematics, Grades 3 through 8 and 10, on the Montana CRT-Alternate was held Tuesday, June 20th through Thursday, June 22nd. There were five panels of 5 to 7 panelists each, and each panel completed the standard setting activities for two tests. The groups were composed as follows:

- Math, Grades 3 & 4
- Math, Grades 5 & 6
- Math, Grades 7 & 8
- Reading, Grades 3 & 4
- Reading, Grades 5 & 6
- Reading, Grades 7 & 8
- Reading and Math, Grade 10

A standards validation procedure was used, in which panelists were presented with starting cut points. The panelists' task was to thoroughly review the starting cuts and either validate them or recommend modifications.

The standard setting method implemented for both content areas and all grades was a modified version of the body of work method. An overview of this method is described below. All panels followed the same procedures.

To help ensure consistency of procedures between panels, each panel was led through the standard setting process by trained facilitators from Measured Progress.

Overview of Process

This section of the report provides an overview of the standard setting process as it was implemented in Montana. The process was divided into the following three stages, each with several constituent tasks.

❖ Tasks completed prior to the standard setting meeting
- Creation of performance levels and performance level definitions

- Preparation of materials for panelists
- Preparation of presentation materials
- Preparation of Instructions for Facilitators Document
- Preparation of systems and materials for analysis during the meeting
- Selection of panelists
- Calculation of starting cut points

❖ Tasks completed during the standard setting meeting
- Orientation
- Completion of standard setting activities for first test:
  - Reviewing assessment materials
  - Reviewing performance level definitions
  - Round 1 judgments
  - Tabulation of round 1 results
  - Round 2 judgments
  - Feedback on Performance Level Definitions
- Completion of standard setting activities for second test
- Evaluation

❖ Tasks completed after the standard setting meeting
- Analysis and review of panelists' feedback
- Preparation of recommended cut scores
- Preparation of standard setting report

Tasks Completed Prior to the Standard Setting Meeting

Creation of performance levels and performance level definitions

The performance level definitions provided panelists the official description of the knowledge, skills and abilities students are expected to be able to display to be classified into each performance level. These performance level definitions were presented to panelists. The definitions are provided in Appendix 2 of this document.

Preparation of Materials for Panelists

The following materials were assembled into folders for presentation to the panelists at the standard setting meeting:
- Meeting agenda
- Confidentiality agreement
- Performance level definitions
- Assessment protocol
- Ordered List of Performance Indicators

- Scoring rubrics
- Visual item map
- Student profiles
- Rating forms
- Evaluation Form

Copies of the agenda, performance level definitions, visual item map, student profiles, rating forms, and evaluation are included in the appendices.

Preparation of Presentation Materials

The PowerPoint presentation used in the opening session was prepared prior to the meeting. A copy of the PowerPoint slides is included in Appendix 3 of this document

Preparation of Instructions for Facilitators Document

A document, "General Instructions for Content/Grade Group Facilitators," was created for the group facilitators to refer to as they worked through the process. A copy of these instructions is included in Appendix 4 of this document.

Preparation of Systems and Materials for Analysis During the Meeting

The programming of all analyses to be conducted during the standard setting meeting was completed and thoroughly tested prior to the standard setting meeting.

Selection of Panelists

Panelists were selected prior to the standard setting meeting. The goal was to have 10 panelists for each of the 7 panels, for a total of 70. The actual number of panelists who participated was 37, distributed as follows:

- Math, Grades 3 & 4 – 5
- Math, Grades 5 & 6 – 5
- Math, Grades 7 & 8 – 5
- Reading, Grades 3 & 4 – 5
- Reading, Grades 5 & 6 – 5
- Reading, Grades 7 & 8 – 5
- Grade 10, Reading & Math – 7

Calculation of Starting Cut Points

The starting cut points for Grades 4, 8 and 10 were the cuts that were established in a standard setting meeting in the summer of 2004. For the remaining grades (3, 5, 6 and 7), starting cut points were calculated by interpolating (or extrapolating) from Grades 4, 8 and 10. The process for calculating the cuts was:

1. find the percentage of students who fell below each raw score cut for grades 4, 8 and 10,
2. standardize the percent-below values using the *z*-transformation,
3. calculate a line of best fit across grades,
4. use the reverse-*z*-transformation to translate the *z*'s back into percent-below values and,
5. for grades 3, 5, 6 and 7, find the raw score associated with the observed percent-below value closest to, but not lower than, the smoothed value.

These five steps were repeated for each of the cut points. The observed percent-below values associated with the starting cuts are presented in Figures 1 and 2 in the final section of this report.

Tasks Completed During the Standard-Setting Meeting

Day 1 of the standard setting meeting began with a general orientation session that was attended by all panelists. The purpose of this session was to provide some background information, provide an introduction to the issues of standard setting, to explain the activities that would occur during the standard setting meeting, and to go over some of the materials that would be used. In addition, some video clips were shown to familiarize the panelists with the assessment and scoring processes. At the conclusion of the opening session the floor was opened to questions about the standard setting process.

After the large-group session, the panelists assembled into their grade/content area groups. Each group was in a separate room.

Completion of Standard Setting Activities for First Test

As mentioned previously, each group of panelists set standards for two separate tests during the meeting. Each group completed all the standard setting activities – reviewing the assessment materials, reviewing the Performance Level Definitions, round 1 and round 2 ratings, and providing

feedback on the Performance Level Definitions – for the first test, then repeated the steps for the second test. Each of the steps is described below.

Reviewing Assessment Materials. Once in the smaller groups, the panelists carefully reviewed the assessment protocol, scoring rubric and scaffolding directions for each indicator.

Reviewing Performance Level Definitions. In the next step, panelists reviewed the Performance Level Definitions. They then discussed the specific characteristics that students in each performance level would have. Specifically, they specified the knowledge, skills and abilities that students would need to demonstrate in order to be classified into each performance level category. Once the panelists came to consensus about these descriptors, they were written onto chart paper and posted in the room so the panelists could refer to them throughout the standard setting process.

Round 1 Judgments. The purpose of round 1 was for the panelists to discuss the starting cut points as a group and make an initial determination as to whether the starting cuts needed to be modified. Each panelist was given a set of student profiles that were prepared by Measured Progress prior to the standard setting. To create the profiles, MP staff first divided the full range of raw score points into a number of score intervals; the number of intervals for the different tests ranged from 15 to 19. Second, the average item score of all students whose total score fell within each interval was calculated for each item. Thus, each student profile shows the expected performance on each item of a student whose total raw score fell in the middle of the score interval on which that profile is based.

In doing the round 1 ratings, panelists used the performance level definitions with the expanded information they completed in the previous step as well as the student profiles. In addition, panelists could refer to the visual item map. The visual item map gives a visual representation of student performance on each of the indicators and can help panelists understand the relationship among the different indicators.

The panelists began by working individually. Starting with the first (lowest scoring) profile, each panelist considered that student's pattern of responses and what it indicated about the knowledge, skills and abilities that student had, then made a preliminary determination as to which performance level that student should be classified into. They then repeated the process for each profile in turn. Once the panelists had completed their individual review, they then began again with the first profile, and discussed each one as a group. Again, the discussion centered around which performance level best described each profile, given the knowledge, skills and abilities demonstrated. Once the group discussions were completed for all profiles, each panelist used the Rating Form provided to record his/her ratings. Facilitators made sure that the panelists understood that they did not need to come to consensus about how to rate each profile. At each round of the process, panelists were told to provide their individual best judgment as to how each profile should be categorized.

Tabulation of Round 1 results. Prior to beginning round 2, panelists were given feedback on the round 1 ratings. The information included the group average cut scores based on the round 1 ratings and the percentage of students statewide that would fall into each performance level category if the round 1 results were used as the final cut points. The average cut points were determined using logistic regression. Specifically, for a given cut, each panelist's rating for each student profile was dichotomized (i.e., above or below the cut). A logistic function was fit to the data for that cut, and the point of inflection on this curve was used to establish each panelist's cut point on the raw score scale. The cuts were then averaged across the panelists to come up with the overall average cut. This process was then repeated for the remaining cuts. This information was used to facilitate discussion of the table ratings in round 2.

Round 2 judgments. During round 2, the panelists examined the results from round 1 and discussed their ratings. The panelists shared their rationale for their ratings in terms of the knowledge and skills students must demonstrate in order to be categorized into a particular performance level. After all panelists had an opportunity to discuss their ratings and the table completed their discussions, the panelists then had the opportunity to change or revise their round 1 ratings. Each panelist once again used the Rating Form to record his/her ratings.

Feedback on Performance Level Definitions. After completing the rating process, the panelists made suggestions for modifications to the performance level definitions based on the round 2 results of the standard setting process.

Completion of Standard Setting Activities for Second Test

Once each group completed all activities for their first test, they then repeated the process for the second test: reviewing the assessment materials, reviewing the performance level definitions, round 1 ratings, round 2 ratings, and providing recommendations for changes to the performance level definitions.

The raw score ranges and percentage of students classified into each performance level, based on the group average cut scores from round 2, are presented in Tables 1 through 7. In addition, the percent-below values associated with the Round 2 cuts are presented in Figures 1 and 2 in the final section of this report.

Table 1

Round 2 Cut Scores and Impact Data -- Grade 3

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	92-100	46.5	87-100	61.2
Proficient	76-91	25.3	70-86	21.4
Nearing Proficiency	46-75	16.2	53-69	6.1
Novice	0-45	12.1	0-52	11.2

Table 2

Round 2 Cut Scores and Impact Data -- Grade 4

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	82-88	46.1	108-112	13.2
Proficient	66-81	34.2	81-107	44.7
Nearing Proficiency	40-65	13.2	58-80	17.1
Novice	0-39	6.6	0-57	25.0

Table 3

Round 2 Cut Scores and Impact Data -- Grade 5

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	94-97	18.6	98-100	23.3
Proficient	75-93	56.9	78-97	42.7
Nearing Proficiency	50-74	13.7	65-77	14.6
Novice	0-49	10.8	0-64	19.4

Table 4

Round 2 Cut Scores and Impact Data -- Grade 6

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	95-100	35.1	98-100	29.5
Proficient	78-94	36.4	85-97	37.2
Nearing Proficiency	47-77	14.3	59-84	14.1
Novice	0-46	14.3	0-58	19.2

Table 5

Round 2 Cut Scores and Impact Data -- Grade 7

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	88-100	47.1	93-100	35.3
Proficient	64-87	29.4	72-92	25.0
Nearing Proficiency	39-63	8.8	54-71	16.2
Novice	0-38	14.7	0-53	23.5

Table 6

Round 2 Cut Scores and Impact Data -- Grade 8

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	87-96	61.2	116-127	22.6
Proficient	70-86	21.2	91-115	29.8
Nearing Proficiency	44-69	9.4	70-90	22.6
Novice	0-43	8.2	0-69	25.0

Table 7

Round 2 Cut Scores and Impact Data -- Grade 10

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	101-108	54.0	116-124	45.0
Proficient	79-100	22.0	89-115	22.0
Nearing Proficiency	56-78	11.0	62-88	18.0
Novice	0-55	13.0	0-61	15.0

Evaluation

At the end of the process, panelists anonymously completed an evaluation form. The results of the evaluation are presented in Appendix 8.

Tasks Completed After the Standard Setting Meeting

Upon conclusion of the standard setting meeting, several important tasks were completed. These tasks centered on reviewing the standard setting meeting and addressing anomalies that may have occurred in the process or in the results.

Analysis and review of panelists' feedback

Upon completion of the evaluation forms, panelists' responses were reviewed. This review did not reveal any anomalies in the standard setting process or indicate any reason that a particular panelist's data should not be incorporated in obtaining the final results. It appeared that all panelists understood the rating task and attended to it appropriately. Panelist responses to the evaluation items are presented in Appendix 8.

Preparation of Recommended Cut Scores

The cut scores obtained in Round 2 of the standard setting process were presented at the Montana Technical Advisory Committee (TAC) meeting on June 29 & 30. The final cut points, as recommended by the TAC, are shown below in Tables 8 through 14 and Figures 1 and 2. The tables show the raw score range for each performance level, and the percentage of students who fall into each performance level category based on the final recommended cuts. The figures show the starting cut points, the Round 2 results, and the final (smoothed) cut points.

The TAC recommended that the Round 2 results for reading be smoothed across the seven grade levels and those smoothed results be used as the final cut points. These cuts are shown in Figure 1 in the lines labeled "Smoothed." For math, however, the recommendation was to smooth across only six of the seven grade levels. The Round 2 results for grade 3, as shown in Figure 2, were quite anomalous. In addition, the panelists who set standards for grades 3 and 4 in math indicated that they did not adequately understand the process when they made their recommendations for grade 3. For their second test, grade 4, the panelists felt much more comfortable with the task and, as shown in Figure 2, their Round 2 recommended cuts for grade 4 are much more consistent with those for the higher grades. For these reasons, the TAC recommended excluding the grade 3 results from the smoothing. Research and Analysis staff then fit a line to the data for grades 4 through 8 and 10 (using the process described above in the section describing the calculation of the starting cuts), and extrapolated to get smoothed cuts for grade 3. These cuts are shown in Figure 2 in the lines labeled "Smoothed."

Table 8

Final (Smoothed) Cut Scores and Impact Data -- Grade 3

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	95-100	38.4	98-100	17.3
Proficient	74-94	38.4	88-97	43.9
Nearing Proficiency	40-73	14.1	75-87	14.3
Novice	0-39	9.1	0-74	24.5

Table 9

Final (Smoothed) Cut Scores and Impact Data -- Grade 4

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	84-88	43.4	107-112	17.1
Proficient	69-83	32.9	73-106	44.7
Nearing Proficiency	51-68	14.5	54-72	15.8
Novice	0-50	9.2	0-53	22.4

Table 10

Final (Smoothed) Cut Scores and Impact Data -- Grade 5

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	88-97	41.2	98-100	23.3
Proficient	74-87	37.3	81-97	38.8
Nearing Proficiency	48-73	11.8	72-80	15.5
Novice	0-47	9.8	0-71	22.3

Table 11

Final (Smoothed) Cut Scores and Impact Data -- Grade 6

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	93-100	45.5	98-100	29.5
Proficient	68-92	31.2	89-97	33.3
Nearing Proficiency	43-67	13.0	60-88	16.7
Novice	0-42	10.4	0-59	20.5

Table 12

Final (Smoothed) Cut Scores and Impact Data -- Grade 7

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	88-100	47.1	96-100	29.4
Proficient	59-87	30.9	69-95	33.8
Nearing Proficiency	32-58	11.8	42-68	17.6
Novice	0-31	10.3	0-41	19.1

Table 13

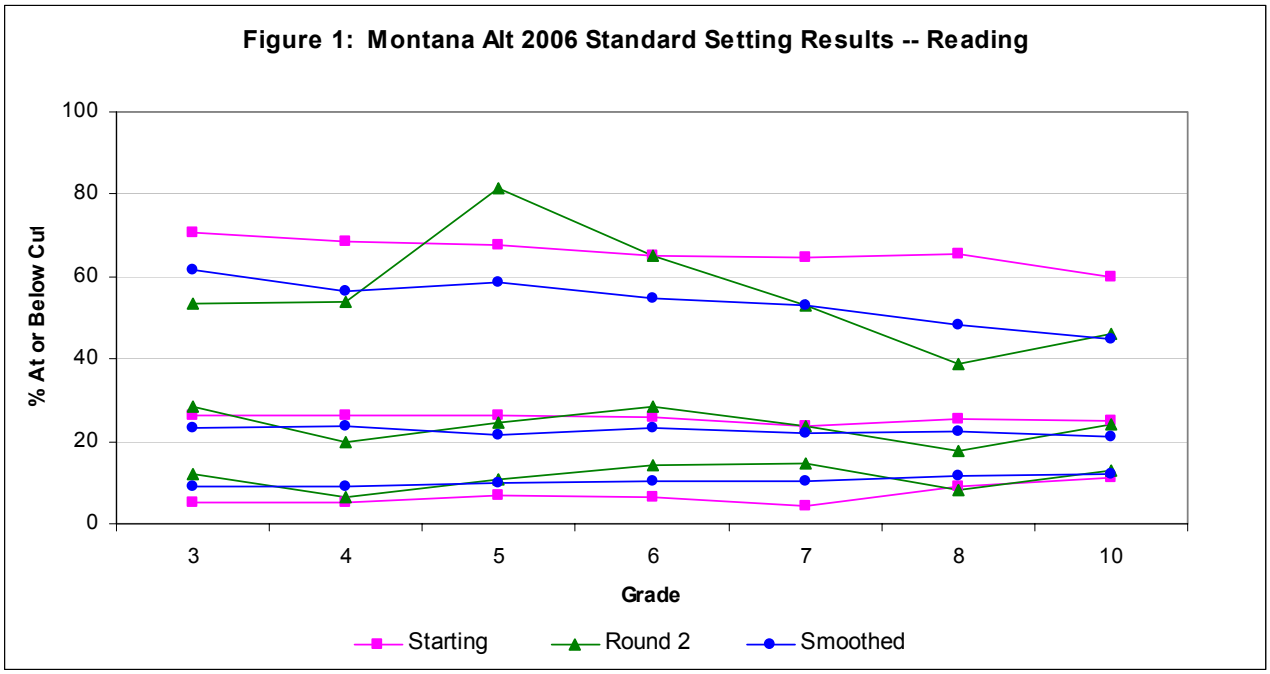
Final (Smoothed) Cut Scores and Impact Data -- Grade 8

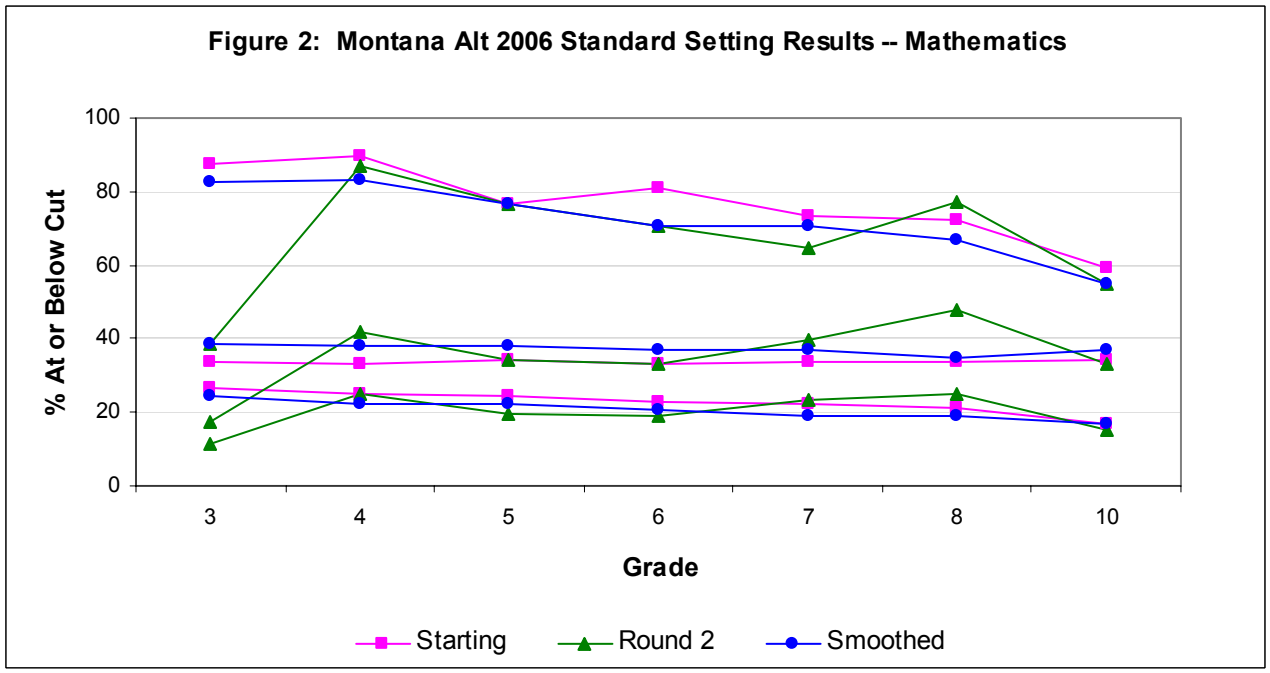
	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	90-96	51.8	107-127	33.3
Proficient	77-89	25.9	83-106	32.1
Nearing Proficiency	60-76	10.6	57-82	15.5
Novice	0-59	11.8	0-56	19.0

Table 14

Final (Smoothed) Cut Scores and Impact Data -- Grade 10

	Reading		Mathematics	
Proficiency Level	Raw Score Range	% in Level	Raw Score Range	% in Level
Advanced	100-108	55.0	116-124	45.0
Proficient	75-99	24.0	97-115	18.0
Nearing Proficiency	53-74	9.0	66-96	20.0
Novice	0-52	12.0	0-65	17.0





Preparation of Standard Setting Report

This report documents the procedures and results of the standard setting meetings in the establishment of performance standards for the Montana CRT-Alternate.

STANDARD SETTING REPORT
Appendix 1

Meeting Agenda

CRT-ALT STANDARD SETTING
MATHEMATICS AND READING (GRADES 3- 8, AND 10)

JUNE 20-22, 2006
AGENDA

TUESDAY, JUNE 20

8:00 – 8:30	Registration & Breakfast (Executive Room)
8:30 – 10:30	Introduction, Overview, and Training of Standard Setting Process
10:30 – 10:45	Break
10:45 – 12:00	Move to Grade Level/Content Area Work Rooms
12:00 – 12:45	Lunch (Executive Room)
12:45 – 2:30	Continue in Work Rooms
2:30 – 2:45	Break
2:45 – 4:00	Continue in Work Rooms
4:00	Adjourn

WEDNESDAY, JUNE 21

8:00 – 8:30	Breakfast (Executive Room)
8:30 – 10:30	Move to Grade Level/Content Area Work Rooms
10:30 – 10:45	Break
10:45 – 12:00	Continue in Work Rooms
12:00 – 12:45	Lunch (Executive Room)
12:45 – 2:30	Continue in Work Rooms
2:30 – 2:45	Break
2:45 – 4:00	Continue in Work Rooms
4:00	Adjourn

THRUSDAY, JUNE 22

8:00 – 8:30	Breakfast (Executive Room)
8:30 – 10:30	Move to Grade Level/Content Area Work Rooms
10:30 – 10:45	Break
10:45 – 12:00	Continue in Work Rooms
12:00 – 12:45	Lunch (Executive Room)
12:45 – 2:30	Continue in Work Rooms
2:30 – 2:45	Break
2:45 – 4:00	Continue in Work Rooms
4:00	Adjourn

STANDARD SETTING REPORT

Appendix 2

Performance Level Descriptors

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Alternate Performance/Achievement Descriptors for Grade 3 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • creates a repeating pattern using objects, shapes, designs, or numbers • carries out a strategy to solve problems involving patterns, relations, or functions • recognizes 2-dimensional shapes • carries out a strategy to solve a geometric problem • determines which of two numbers is closer to the quantity in a given set • uses methods and tools to solve a problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator • identifies a reasonable quantity when guessing the amount of a given set
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • extends and explains an alternating pattern of two or more objects, shapes, designs, or numbers • shows a quantity • extends or supply a missing element in a repeating pattern by attribute or number • reproduces an alternating pattern of two or more objects, shapes, designs, or numbers • recognizes properties of two-dimensional shapes • uses a quantitative label when making a guess • touches and moves shapes toward creating new shapes

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates an understanding that numbers, as opposed to letters, are used to express quantity, order, or size/amount • counts with another person, • identifies/names shapes as circles, squares, triangles, rectangles, and ovals • matches two- dimensional physical shapes to pictures of the shapes in different orientations • explains/shows spatial reasoning • finds various shapes in the environment • enters numbers correctly on a calculator/writes (communicates) numbers correctly
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • attends to another person combining and subdividing shapes • attends to another person making patterns and to a person describing patterns • attends to a person demonstrating with concrete materials. • attends to objects or pictures of two- and three- dimensional geometric shapes and the relationships among them • attends to another person estimating an amount of a given set

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Alternate Performance/Achievement Descriptors for Grade 3 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • follows 3 step or more directions • chooses correct choice among the 4 options correctly • asks for clarification/help if needed • gives full attention to literacy materials/selection • communicates using expanded vocabulary • correctly answers who, what, and where questions and contributes own thoughts/ideas • is able to generalize information from one setting to another • responds with a complete thought • recognizes and articulates the main idea
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • follows 2 step directions • attends fully to the activity • contributes/elaborates on the response • shows independence/confidence • chooses correctly among three options (verbal, pictures, touch, other stimuli) • participates actively • understands what he/she is doing • cooperates with the administrator • addresses responses with Yes or No • communicates and demonstrates words he/she knows and asks for clarification if needed • attends long enough to complete a given task • attempts to answer what and where questions

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • explores literary items (holds book in correct position, recognizes pictures vs. print, uses left to right orientation • attends with support easily • begins to respond to literacy with varied prompts • responds to others • holds eye contact • begins to communicate with a purpose • communicates the correct choice between two options • followsone step direction consistently
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity. • attends to materials being displayed. • responds to own name • attends for a short period of time • begins/attempts to participate with supports • attempts to communicate

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Alternate Performance/Achievement Descriptors for Grade 4 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • computes with addition • communicates relationships between categories • extends a pattern • explains reasoning about probability items • creates a pattern • computes with subtraction. • extends a growing pattern • describes characteristics • makes accurate predictions • estimates
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • represents data • compares categories • extends an alternating pattern • applies a number/word to a quantity of objects in a collection (few/many, one/many, more/less) • creates a repeating pattern • sets up a graph (i.e. labels axes) • makes a bar graph. • determines which number is closer to a quantity in a given set • predicts outcomes of a chance event • describes or recognizes characteristics of categories • has knowledge of vocabulary • sets up a bar graph with labeling • compares/contrasts quantity with manipulatives • answers questions about a graph

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • finds the category with the most/least. • demonstrates one-to-one correspondence between, up to 12 objects and counting numbers (rational counting) • uses final number as quantity of a set • answers questions about a graph • counts using sequential order of numbers • extends alternating patterns • understands one-to-one correspondence • knows quantity of a set • represents/Records data by number or tally mark • counts to 15 in order • sorts/categorizes
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates the beginning of a math activity • attends to materials being displayed • attends to another person demonstrating a procedure • demonstrates the concept of 1 • sorts objects into categories • attends to a person recording • attends to a task • readies self • attends to teacher

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Alternate Performance/Achievement Descriptors for Grade 4 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • responds accurately and communicates knowledge with expanded vocabulary • chooses correctly among four options • communicates a complete thought related to topic or concept being tested • answers correctly "what", "when" and "where" questions • attends to literary materials from beginning to end • asks for help • identifies and communicates/shares main idea of literacy materials to others • grasps new ideas and words and applies them • follows multi-step directions
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • follows two-step directions • interacts independently with purpose • communicates knowledge of basic vocabulary • demonstrates written word has meaning • chooses correctly among three options • attends adequately to literacy materials • answers yes and no questions about information in print and non-print materials • answers "who" questions • identifies beginning main idea • uses educational literacy materials appropriately

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • communicates the correct choice between two options • attends and responds to literacy materials appropriately with support • follows one-step directions • explores pictures, symbols and objects when presented • displays knowledge of front/back, right side up, page turning and scanning of literacy materials • uses prior knowledge to demonstrate knowledge of basic vocabulary
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • begins to participate with support • attends for short periods to the teacher, materials, and literacy tasks • acknowledges the literacy activity • responds to own name • attends to pictures, symbols, objects when presented

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Alternate Performance/Achievement Descriptors for Grade 5 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • recognizes 0-100 independently • requires no clarification or prompts • demonstrates mastery of basic math concepts • demonstrates mastery of math vocabulary • solves problems using addition & subtraction • uses measurement tools • responds to test questions
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • recognizes 0-100 • discriminates correctly between 3 choices • begins to understand words that indicate operations in word problems • demonstrates a basic understanding of sequencing • demonstrates basis understanding of math skills • demonstrates a basic understanding of math concepts and vocabulary
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates a limited understanding of math concepts • demonstrates a limited understanding of math vocabulary • demonstrates a limited ability to generalize • demonstrates a limited ability to master a specific task in a specific environment • uses patterns to copy concrete patterns using manipulatives • recognizes digits 0-20 • demonstrates 1:1 correspondence • demonstrates single digit addition, i.e. less than 9
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • demonstrates an understanding of the concepts of some/more/ less/take away/all gone/ no more • select the appropriate tool to be used in making a measure

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Linda McCulloch
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Alternate Performance/Achievement Descriptors for Grade 5 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • relates and uses relevant prior knowledge to make connections • uses pictures, symbols, and objects independently in problem solving • responds to test materials to respond to a specific item • gives correct response among four options • orients text and reads independently and with teacher • communicates the correct choice with multiple options • responds to basic comprehension questions • sounds out unfamiliar words using phonics
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • relates prior knowledge accurately and appropriately • explores pictures, symbols and objects • needs occasional re-direction to the test materials to respond to a specific item • responds to test materials to respond to a specific item • orients text and uses text with limited prompting • communicates the correct choice among three options • responds to basic comprehension questions given three options • sounds out unfamiliar words using phonics with assistance
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • understands when response is needed • displays knowledge of front/back, rights side up, page turning and scanning of literacy materials with prompting • communicates the correct choice between two options • explores pictures, symbols, and objects when prompted • needs multiple re-direction to the test material to respond to a specific item • relates prior knowledge to present situation • sounds out unfamiliar words using limited phonemic knowledge • responds to basic comprehension questions using yes or no
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • explores pictures, symbols, and objects with teacher assistance • responds when given modeling and supports • recognizes phonemic correspondence when modeled • attends and acknowledges literacy activities

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Alternate Performance/Achievement Descriptors for Grade 6 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • demonstrates mastery understanding of abstract math concepts and skills • demonstrates mastery of telling time to the one half hour and hour and applies the concepts of time • demonstrates mastery on the ability to perform visual/special reasoning • demonstrates mastery on the ability to sequence numbers and/or patterns • demonstrates mastery on the understanding and use of math vocabulary • consistently demonstrates the ability to generalize knowledge and skills to different environments
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • discriminates correctly among three choices • demonstrates a basic understanding of abstract math concepts and skills (addition and subtraction) • tells time to the one half hour and hour and applies concepts of time • demonstrates a basic ability to perform visual/special reasoning with minimal prompts • demonstrates a basic understanding of sequencing • student demonstrates a basic understanding of and the ability to use math vocabulary • demonstrates the ability to generalize knowledge and skills to different environments a with some supports
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • responds accurately when choosing between two answers • demonstrates a limited understanding of abstract math concepts and skills • demonstrates a limited ability to tell time or apply the concepts of time • demonstrates a limited ability to perform visual/special reasoning • requires concrete manipulatives when creating a pattern • demonstrates a limited understanding of math vocabulary • demonstrates a limited ability to generalize knowledge and skills to different environments
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • demonstrates the ability to cover a figure with shapes • produces a numeral to 10

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Alternate Performance/Achievement Descriptors for Grade 6 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • orients text and reads independently or with teacher • communicates the correct choice with multiple options • uses diagrams and models to understand text independently • creates diagrams and charts to show understanding of text • relates text to appropriate personal experiences • identifies meaning of unfamiliar words using context clues • responds to basic questions about plot outcome • demonstrates basic understanding of main ideas and some supporting details • recognizes diverse perspectives
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • orients and uses text • communicates the correct choice among three options • uses diagrams and models to understand text with limited prompting • creates diagrams and charts to show understanding of text • relates text to appropriate personal experiences • identifies meaning of unfamiliar words using context clues • responds to basic questions about plot outcome • demonstrates basic understanding of main ideas and some supporting details • recognizes diverse perspectives

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • understands when response is needed • displays knowledge of front/back, rights side up, page turning and scanning of literacy materials with prompting • communicates the correct choice between two options • uses diagrams and models to understand text • creates diagrams and charts to show understanding of text • relates text to personal experiences • identifies meaning of unfamiliar words using context clues • responds to basic questions about plot • demonstrates basic understanding of main ideas and some supporting details • recognizes diverse perspectives
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • orients text • acknowledges correct choice • attends to teacher-created diagrams and models to understand text • connects text to personal experience only with teacher guidance • acknowledges and attends to literacy activity

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Alternate Performance/Achievement Descriptors for Grade 7 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • engaged in the task • understands 1:1 correspondence • adds/counts money • graphs • sorts and makes decisions based on sorting
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • identifies coins and values • sorts objects by function • makes comparisons (>,<) • makes a statement about the data • adds and subtracts
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • knows 1:1 correspondence, concept of "none" • understands the concept addition (more) • understands the concept subtraction (less) • matches coins • sorts by appearance, various (two or more) characteristics (size, shape, color)
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • attends to models/prompts • recognizes numbers (symbol or rote recitation) • sorts by one characteristic

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Alternate Performance/Achievement Descriptors for Grade 7 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • makes inferences • sequences beginning, middle, and end and supporting details (specific facts) • differentiates between fact and opinion • understands abstract vocabulary (true/false) • identifies/understands various genre (i.e. cultural lessons, informational, fables/myths, biographies) • understands story lessons/author's purpose • identifies chapter heading (abstract sense) to find/use info • uses reading strategies to gain information (i.e. rereading, use of key words, use of features of text)
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • demonstrates readiness with limited/no prompting • sequences beginning, middle, and end • recalls multiple facts about a reading selection • understands literal vocabulary and the relationships • identifies main idea of the story and some supporting facts/details • identifies purposes of various texts (i.e. map, dictionary, bus schedule, etc.) • identifies title and basic parts of a book • responds with three response options

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates readiness by following one-step directions or with teacher modeling/prompting • identifies an object and its function • maintains focus from beginning to end • understands story beginning and ending • understands basic main idea (answer with one picture/short response) • recalls at least one fact about a reading selection • locates name of book and basic print awareness • responds mostly through basic yes/no questions or with two (or three options with further teacher clarification) options
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • directs attention to external stimuli when requested (i.e. turns head in direction, sits quietly, etc.) • interacts with stimuli • responds to external stimuli (i.e. nods head, operates switch, points to, etc.) • is assisted through a correct response • attempts to participate in activity • has general awareness of people and activity • responds to own name • responds to words, pictures and symbols

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Alternate Performance/Achievement Descriptors for Grade 8 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • measures to the inch • has basic concept of perimeter • has concept of fractions- demonstrates 1/2 • has Algebra concepts • identifies functions (problem solving) • labels both sets of data • explains conclusions drawn from graph (decision making) • remains actively engaged and may initiate some interaction with instructor during testing • consistently arrives at correct answer • applies beginning connections between concrete and symbolic representations, operations, measurement, graphing and problem solving strategies
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • understands concept that a ruler is used to measure distance • reads simple measurements (1/2, 1/4) • demonstrates calculator skills • counts by (2,5,10) • fills in data on a graph • makes correct responses from 3 choices (given/prompt) • demonstrates beginning connections between concrete and symbolic representations, operation (+/-), measurement and graphing

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates solid number concept for 1:1 • can count single digits • can add/subtract single digits • communicates understanding of beginning connections between concrete and symbolic representations.
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity. • attends to materials being displayed. • engages with instructor with prompts

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Alternate Performance/Achievement Descriptors for Grade 8 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • locates title and other information from a variety of documents/sources • distinguishes/identifies fact and opinion • identifies and uses reference/resource materials to gain information about words and their function • recognizes vowel letter-sound • uses reading strategies to gain information (i.e. rereading, use of key words, use of features of text) • responds independently • reads and comprehends a paragraph • records facts • identifies main idea • connects prior knowledge to make meaning of text • identifies vowels • is able to use various forms of communication to express self
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • identifies a word/picture/symbol for content communication (identify topic that was chosen previously) • locates/identifies title and other parts of a book • identifies facts (i.e. main idea, supporting details) • uses reference materials to gather information for a research project • responds with three response options (a range of options) • produces name • has basic word recognition • has beginning reading skills • understands that groups of words contain meaning and can gain meaning from print • identifies a variety of materials and their uses • navigates environment • is able to engage in conversation using varying techniques • has a firm grasp of sound/symbol association • identifies words from sentences • tracks while reading • identifies own learning style

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • recognizes name in print/object/symbol • identifies letters by name/sign • indicates a preference/choice • indicates a word in a sentence • use auditory/visual scanning to maintain place • identifies a word/picture/object of familiar places and people • locates library/reference center/media center • responds mostly through basic yes/no questions or with two (or three options with further teacher clarification) options • identifies preference • understands when response is needed • makes choices between two or three options • recognizes difference between letters and other symbols (e.g. numerals) • orients text (top to bottom) • "reads" left to right • differentiates between materials and objects • places answers in correct location with appropriate tools • understands roles of people in environment • follows routines and procedures • recognizes that letters have names and is aware of letter sounds • has awareness of print and organization of print on the page
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity. • attends to materials being displayed. • responds to name • participates in activity • demonstrates readiness by following one-step directions or with teacher modeling/prompting • identifies writing tools/common objects, words/pictures/symbols • requires high level of teacher direction • directs attention to external stimuli when requested (i.e. turns head in direction, sits quietly, etc.) • interacts with stimuli (i.e. teacher, words, pictures, and symbols) • responds to external stimuli (i.e. nods head, operates switch, points to, etc.) • makes eye contact • attempts to participate in activity • directs attention to stimuli • interacts with stimuli • has general awareness of people and activity • responds to own name • responds to words, pictures and symbols

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Alternate Performance/Achievement Descriptors for Grade 10 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • generalizes very basic information • completes 2 to 3 step processes of addition and subtraction • applies beginning connections between concrete and symbolic representations by using a table to draw conclusions • responds on nearly every task • generalizes and adept in formation and skills • explains how and why he/she arrived at A + A solution
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • chooses correct procedures to solve simple number problems • uses and complete and/or extend very basic patterns of data to make decisions • is able to demonstrate beginning connections between concrete and symbolic representations • models math problems • uses and completes or extends patterns of data to make decisions • makes basic computations • applies information
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • recognizes properties of limited (square/circle) 2-dimensional shapes • understands quantity • matches and identifies
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity. • attends to materials being displayed. • attends to a person and/or task • shows limited understanding of quantity when given 2 choices

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Alternate Performance/Achievement Descriptors for Grade 10 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • understands basic abstract symbols • selects main idea from a selection read aloud • identifies appropriate resources for gaining specific information • identifies similarities and differences • combines information from two or more resources • independently responses on nearly every task • uses auditory/visual scanning • uses text features (sequential) • identifies appropriate informational resource to gain specific information • identifies word/picture/symbol and object used for content • selects literacy materials by character or topic • identifies the main idea • rereads to gain understanding
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • has a beginning understanding of abstract symbols • communicates an opinion • demonstrates understanding of difference between information • uses prior knowledge • is beginning to identify appropriate resources for gaining specific information • identifies words/pictures/symbols and objects that are new and unfamiliar • indicates adaptations needed to understand text • demonstrates an understanding/awareness of prior knowledge of concept

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • indicates preferences • begins to use access to prior knowledge • begins to use auditory and/or visual scanning skills • may be able to match and identify words/pictures/ symbols/objects • displays knowledge of direction • locates picture/object/symbol • identifies words/pictures/symbols and objects • communicates an opinion • identifies resources
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • attends to a person and/or task • interacts with stimuli (i.e. teacher, words, pictures, and symbols) • responds to external stimuli (i.e. nods head, operates switch, points to, etc.) • makes eye contact • attempts to participate in activity • directs attention to stimuli • interacts with stimuli • has general awareness of people and activity • responds to own name • responds to words, pictures and symbols

STANDARD SETTING REPORT

Appendix 3

Opening Session PowerPoint Presentation

Montana CRT-Alternate Assessment Program

Orientation to Standard Setting

June 2006

Decisions about Participation

- CRT-Alternate is intended for students with severe cognitive disabilities
- Participation decisions made and documented by student IEP teams
- Guidance document provides questions to assist determining which test is appropriate for a student
- A full range of accommodations were possible with the CRT

Participation decisions should NOT be based on:

- Excessive or extended student absences
- Student's disability label
- Social, cultural, economic differences
- Amount of time the student receives special education services
- Academic achievement levels lower than peers

Guidance Document Decision-Making Questions

- ***Does the student have an active IEP and receive services under the Individuals with Disabilities Education Act (IDEA)?***
- ***Do the student's demonstrated cognitive abilities and adaptive behavior require substantial adjustments to the general curriculum?***

Guidance Questions (continued)

- ***Do the student's learning objectives and expected outcomes focus on functional application of skills, as illustrated in the student's IEP's annual goals and short-term objectives?***

- ***Does the student require direct and extensive instruction to acquire, maintain, generalize and transfer new skills?***

Review Answers

- All questions "yes" = CRT-Alternate
- Any questions "no" = CRT with appropriate accommodations
- CRT accommodation possibilities include reading the reading test to students, i.e., nonstandard accommodation
- Nonstandard accommodation results in Novice score for school accountability purposes

Materials

- Agenda
- Test Booklet
- Scoring Guide
- Expanded Benchmarks
- Ordered List of Performance Indicators
- Visual Item Map
- Student Profiles
- Rating Sheet
- Draft Performance Level Descriptors
- Evaluations
- Reimbursement Forms

Two Assessment Formats

Grades 3,5,6, and 7

- Tasklets
  - Five distinct tasks/activities
  - Five items per activity
  - Each tasklet starts with an item that keys the student into the activity

Grades 4,8, and 10

- Activities
  - Long activities
  - Introduces the type of performance at the beginning of the assessment
  - The long activity usually starts with a couple of items that key the student into the activity

Test Booklet

- Activity steps
- Suggested activity
  - Materials
  - Script
  - Scaffold
- Student work/student will:
- Performance Indicators/Scoring Guide

CRT-Alternate Scoring Guide

Montana Alternate Assessment Scoring Guide

Performance (independence and accuracy)

Used to score every item during the structured observation test activity.

4	3	2	1	0
Student responds accurately and with no assistance.	Student responds accurately when teacher clarifies, highlights important information or reduces the range of options to three.	Student responds accurately when teacher provides basic yes/no questions or forced choices between two options.	Student is guided to correct response by teacher (e.g., modeling the correct response or providing full physical assistance).	Student does not respond or actively resists.

Expanded Benchmarks

- Expanded from end of grades 4, 8, and 10 to foundational skills
- Are not grade level specific, due to the wide diversity of students in this population.
- Used to develop the assessment performance indicators

Video Clip #1

QuickTime™ and a
DV/DVCPRO - NTSC decompressor
are needed to see this picture.

Video Clip #2

QuickTime™ and a
DV/DVCPRO - NTSC decompressor
are needed to see this picture.

Ordered List of Performance Indicators

- Lists the performance indicators in order from least to most difficult overall.
  - The easiest item will be the one that most students completed accurately and independently.
  - The hardest item will be the one that most students needed the greatest amount of support to complete accurately.
- Shows the original item number in the test booklet.

Example: Grade 4 Reading Ordered List of Performance Indicators

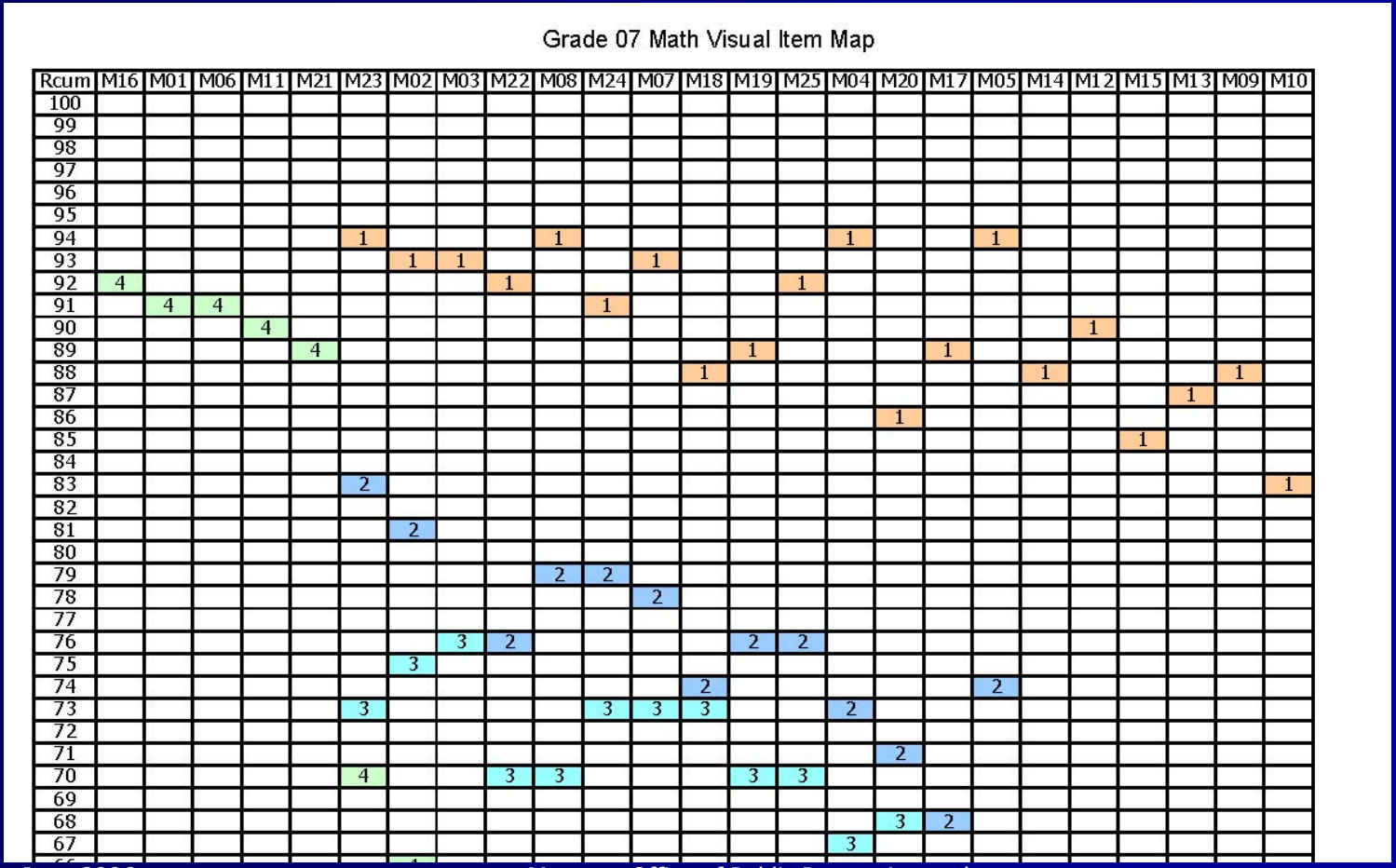
Montana CRT-Alternate Assessment
Grade 5 Mathematics
Ordered List of Performance Indicators

Order of Difficulty (least to most difficult)	Original Item Number	Performance Indicator (Item)
1.	1.	Attend to teacher placing numbers in order from least/smallest to greatest/largest.
2.	6.	Attend to another person combining objects to add.
3.	16.	Attend to another person reading temperature.
4.	21.	Attend to another person measuring capacity.
5.	11.	Attend to another person showing the relationship between two variables using objects, pictures, symbols, or numbers.
6.	7.	Demonstrate an understanding of the concepts of some/more/ less/take away/all gone/ no more.
7.	17.	Select the appropriate tool to be used in making a measure.
8.	2.	Position numbers on a number line.
9.	12.	Recognize a cause-effect relationship between two elements.
10.	18.	Read temperatures from a thermometer to the accuracy of the labeled numbers.
		Choose correct strategies or procedures to solve an algebraic problem

Visual Item Map

- Columns - level of difficulty for each performance indicator (item), from easiest to hardest.
- Rows - percent of students who received at least that score point on the indicator.

Example:
Grade 4 Reading Visual Item Map



Student Profiles

- Represent how the average student at each selected total score actually performed on the assessment .
- A student profile for approximately every 5 score points (between 16 and 26 profiles).
- Performance Indicators (Items) are ordered from least to most difficult.
- Suggested Activity and Student Work
- Scaffolding
- Performance Indicator (Item)
- Score level for each Performance Indicator (Item)

Example: Grade 4 Reading Student Profile 1 (page 1)

Montana CRT-Alternate Assessment
Grade 6 Reading Student Profile 1
Total Score 7

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
1.	**Teacher will:** Place the reading material on the work space. ***"We will read about castles. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Look toward the reader and/or show interest in the reading material.	Attend to person and literacy materials in a purposeful manner.	X				
2.	**Teacher will:** Place the reading material on the work space. ***"We will read about trash. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Attend to (look at, turn toward, listen to, etc.) the teacher and/or the reading materials.	Attend to people and literacy materials in a purposeful manner.					X
3.	**Teacher will:** Place the reading material on the work space. ***"We will read a book. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item.	Attend to person and literacy materials in a purposeful manner.					X

Rating Sheet

- **Please remember to put your ID number on the top of the form.**
- Student Profiles listed in order
- Rating column for each round
- Assign each profile a number
  - Advanced 4
  - Proficient 3
  - Nearing Proficiency 2
  - Novice 1

Example:
Grade 4 Reading Rating Sheet

Reading Grade 8 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1			10	4	4		0	2			0	0				0											
2			22	4	4	4	4	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
3			30	4	4	4	4	1	1	0	4	1	3	0		0	1	0	1	0	0	0	0	0	0	1	1
4			35	4	4	4	4	4	2	2	0	2	0	1	0	1	0	2	2	1	0	0	2	0	0	0	0
5			51	4	4	4	4	3	2	4	0	4	4	4	4	4	0	0	0	0	1	0	0	1	4	0	0
6			56	4	4	4	4	3	2	2	0	4	4	2	1	2	2	2	2	1	1	1	4	2	1	2	2
7			60	4	4	4	4	4	3	3	4	1	3	4	1	4	1	4	1	3	1	1	1	2	1	1	1
8			65	4	4	4	4	4	4	4	0	4	2	4	1	3	3	2	4	0	4	3	1	1	1	0	4
9			69	4	4	4	4	3	3	4	4	2	2	3	2	3	4	3	3	3	3	2	2	2	1	2	2
10			74	4	4	4	4	4	3	3	4	4	4	3	3	4	3	2	3	3	3	2	1	1	4	1	3

CRT-Alternate
Draft Performance Level Descriptors

Advanced
4

- The student at Advanced level **accurately and independently** demonstrates the ability to carry out **comprehensive** content specific performance indicators.

CRT-Alternate
Draft Performance Level Descriptors

Proficient
3

- The student at the Proficient level, **given limited prompting**, demonstrates the ability to respond accurately in performing **a wide variety** of content specific performance indicators.

CRT-Alternate
Draft Performance Level Descriptors

Nearing Proficiency
2

- The student at the Nearing Proficiency level, **given moderate prompting**, demonstrates the ability to respond accurately in performing **a narrow set** of content specific performance indicators.

CRT-Alternate
Draft Performance Level Descriptors

Novice
1

- The student at the Novice level, **given physical assistance and/or modeling**, is **supported to participate** in content specific performance indicators.

Setting Standards for the Montana CRT-Alternate Assessment

Purpose

- To establish the scores on the Montana CRT-Alternate Assessment that separate the following performance levels:
  - Advanced/Proficient
  - Proficient/Nearing Proficiency
  - Nearing Proficiency/Novice

Overview of Standard Setting Activities

- Brief introduction to standard setting
- Review Assessment and Standard Setting Materials
- Review performance level descriptors
- Identify characteristics of students in each performance level

Overview of Standard Setting Activities

- Complete Round 1 Ratings:
  - Individually assign students, based on their performance on the assessment, to one of the 4 performance levels
- Complete Round 2 Ratings:
  - Revise round 1 ratings based on discussion with colleagues
- Complete Round 3 Ratings:
  - Revise round 2 ratings based on discussion and impact data

Overview of Standard Setting Activities

- Recommend adjustments or revisions to performance descriptors based on cut point placements
- Complete evaluation form at the end of Day 2

Brief introduction to standard setting

- What Is Standard Setting?
  - Set of activities that result in a recommendation of threshold or cut points on an assessment
  - We are trying to answer the question: What score does a student need to achieve to be considered performing at the _____ performance level?

Brief introduction to standard setting

- All standard setting has a
  - data component (what we are doing here today and tomorrow) and a
  - policy component (an evaluation of whether the standard setting was proper, resulted in reasonable scores, etc…)
- The policy component is where the final standards are put in place. This means the acceptance, rejection, or modification of the data component.

Process of setting standards on the Montana CRT-Alternate Assessment

- Panelists will become very familiar with the assessment for their grade and content area and the performance level descriptors
  - Review the reordered assessment. This is a list of the items specific to your grade and content area presented in order of difficulty.
  - Review the performance level descriptors.

Process of setting standards on the Montana CRT-Alternate Assessment

- Describe the characteristics of students in the Nearing Proficiency, Proficient, and Advanced performance levels:
  - Consider the knowledge, skills and abilities students have if they are in the Nearing Proficiency category, as well as the level of support they require. Keep in mind that the category includes a range of skills, from students who are minimally Nearing Proficiency to students who are just below Proficient.
  - Repeat for the Proficient and Advanced categories.

Process of setting standards on the Montana CRT-Alternate Assessment

- It is important for panelists to reach consensus about the definitions of the performance level descriptors.
- You can disagree as to whether a particular student should be placed in a particular performance level
- However, you cannot disagree as to the definition of the particular performance level category

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 1 ratings
  - In Round 1, panelists will be working individually
  - Review the items that comprise the assessment for your content area and grade level
  - Review the standard setting materials: student profiles & rating form
    - Student profiles represent how the average student at each selected total score point actually performed on the assessment

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 1 ratings
  - Examine each student profile and make a judgment as to whether a student displaying that level of ability belongs in the Novice, Nearing Proficiency, Proficient, or Advanced performance level.
  - Start with the profile with the lowest score and, in turn, work your way through all the profiles.

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 1 ratings
  - In completing your ratings, use the following designations:
    - 1=Novice
    - 2=Nearing Proficiency
    - 3=Proficient
    - 4=Advanced
  - Again, the Round 1 ratings should be done individually without any discussion (you'll have plenty of opportunity for that). We want *your* best judgment.

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 2 ratings
  - In this round, you will be working in table groups
  - Round 1 results (where each panelist at the table placed his or her cut points) will be shared with each table
  - Begin with the first profile and discuss which category each panelist placed that student in.
  - Each panelist should have a rationale for their placement.

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 2 ratings
  - Based on the discussion, make a second rating
    - You may want to revise your rating based on the discussion or you may want to keep your rating the same
    - Note: It is not necessary for the panelists to come to consensus about how to rate each profile.
  - Do the same for each profile: discuss, and revise or leave the same

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 3 ratings
  - In Round 3, you will be working as a whole group
  - Prior to beginning Round 3, the group leader will summarize on the flip chart the following results based on Round 2 ratings:
    - the table cut points
    - the whole group cut points
    - Impact data consisting of the percentage of students in each performance level based on the whole group cut points

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 3 ratings
  - Upon reviewing the cut points and impact data, begin with the first profile and discuss which category each panelist placed that student in.
  - Again each panelist should have a rationale for their placement.

Process of setting standards on the Montana CRT-Alternate Assessment

- Round 3 ratings
  - Based on the discussion, make a third rating
    - You may want to revise your rating based on the discussion and/or the impact data, or you may want to keep your rating the same
    - Again, it is not necessary for panelists to come to consensus about how to rate each profile.
  - Do the same for each profile: discuss, and revise or leave the same

“Standard Setting” is now done

Finalize Recommendations for Performance Descriptors

- Revisit the performance level descriptors
- Make recommended adjustments or revisions, based on where the cut points were placed. For example:
  - Clarify
  - Add more information
  - Add content specific detail
- Recommendations will be recorded as bullet points, not in final form

Complete Evaluation Form

- Anonymous
- You won’t hurt anyone’s feelings
- It’s important

Good Luck!

STANDARD SETTING REPORT

Appendix 4

Instructions for Group Facilitators Document

GENERAL INSTRUCTIONS FOR CONTENT/GRADE GROUP FACILITATORS
Montana CRT-Alternate Standard Setting
Reading and Mathematics, Grade 3-8 & 10

I. Prior to Round 1

Introductions:

1. Welcome group, introduce yourself (name, affiliation, a little selected background information).
2. Have each participant introduce him/herself.
3. Ask participants to complete Non-Disclosure Forms. Collect forms.

II. Review the assessment materials

Overview: Some of the panelists administered the assessment to students, while others did not. In order to ensure that all panelists have an understanding of the knowledge and skills assessed, thoroughly review the protocol with the group, walking through each item and pointing out the scaffolding script.

1) Review the protocol
2) Review the scoring rubric
3) Review the scaffolding directions for each indicator

III. Discuss Performance Definitions & Describe Characteristics of the Students who meet the definitions

Overview: In order to establish an understanding of the expected performance of students in each performance level, panelists must have a clear understanding of:

1) The draft performance level descriptors, and

2) Characteristics of student from "just able enough" to the top of each performance level range. The intent is to describe the proficiencies students demonstrate at each level. Remind the panelists that each level is a range, and they should start off by describing the students who barely meet that range.

The purpose of this activity is for the panelists to obtain an understanding of the draft performance level descriptors, and to develop a list of characteristics that captures the skills attained at each level. The list should contain both what these students can do independently and what they can do with a level of support that still shows they possess the skills necessary at each level

It is important to understand that the draft performance level descriptors and the list of characteristics are to be used as a starting point only and that they will be reviewed again at the end of the entire process and any recommended adjustments will be recorded for OPI.

This activity is critical since the ratings panelists will be making in rounds 1 and 2 will be based on these understandings.

Activities:

1) Introduce task.
   a. Review draft performance level descriptors with the group.
   b. Tell the panelists they will be discussing the descriptors in relation to the content skills that were tested.
2) Beginning with the *Nearing Proficiency* category, have panelists discuss the performance level descriptors as a group. The purpose of this is to have a collegial discussion and bring up/clarify any issues or questions that any individual may have.
3) On chart paper, create a list of the knowledge, skills and abilities of students who are in the *Nearing Proficiency* category, from "just barely" to the end of the *NP* range.
4) Repeat steps 2&3 for the *Proficient* and *Advanced* categories, creating a bulleted list describing the range of knowledge, skills and abilities for each.
5) Note: It is important for the group to come to consensus about the meaning of the performance level descriptions and the characteristics they generated.

IV. Round 1

The purpose of Round 1 is for the panelists to discuss the initial categorizations of the profiles according to the starting cuts and determine whether those categorizations make sense, or whether they need to be modified. Starting cuts for grade 4, 8 and 10 are the cuts that are currently being used for reporting in those grades. For the remaining grade levels, starting cuts were determined by interpolating/extrapolating from the cuts for 4, 8 and 10. The panelists will consider each student profile in order beginning with the lowest score and discuss what performance level best matches the skills and abilities represented by that particular performance profile. Once the discussions are completed, each judge will use the rating form provided to record his/her Round 1 ratings. Panelists will refer to the lists of skills and abilities developed earlier as they consider their placements.

Overview of Round 1: Panelists will thoroughly review the reordered assessment indicators and scoring rubric. Panelists will be given a packet for each student profile that lists the performance indicators, ordered by difficulty from easiest to hardest, and indicates what score the student got on each indicator. Panelists will also receive the visual item map, which they may use to help them understand the relationship among the indicators, and the rating form, which summarizes the student profiles and includes columns where the panelists will record their Round 1 and Round 2 ratings.

Activities:

1. Make sure panelists have the following materials:
   - Ordered List of Performance Indicators
   - Scoring Rubric
   - Student Profile Packet
   - Visual Item Map
   - Rating Sheet

2. Review how to read and use the visual item map and ordered list of performance indicators
    - Ordered List of Performance Indicators
      A linear list of the performance indicators from easiest to hardest, based on students' average scores for each indicator. Thus, an indicator that is easiest means that the most students accomplished that task independently. The hardest item shows most students needing the greatest amount of support to accomplish the task.
    - Visual Item Map:
      A visual representation of the average student performance on each of the indicators
      Used to help panelists understand patterns of responses and the relationship among the indicators
3. Have panelists write their ID number on their rating sheet. Their ID number is on the back of their name tags.
4. Have panelists review the student profiles and rating sheet. Explain that the student profiles represent how the average student at each selected total score point performed on each of the indicators. Point out that the initial categorization of the profiles according to the starting cut points is indicated on the rating sheet. As a group, the panelists will:
    - For each student examine their profile and discuss whether a student displaying that level of ability belongs in the *Novice*, *Nearing Proficiency*, *Proficient*, or *Advanced* performance level.
    - They will start with the profile with the lowest score and in turn, work their way through all the profiles assigning students based on their performance on the assessment to one of the 4 performance levels. As panelists work, let them know they can change their designations as they work. Also let them know that the *Novice* and *Advanced* levels may be the easiest to determine.
    - In completing the rating sheet, panelists should use the following designations:
        - 1 – *Novice*
        - 2 – *Nearing Proficiency*
        - 3 – *Proficient*
        - 4 – *Advanced*

      Panelists will write the appropriate number for each profile on the sheet, making sure there is a rating entered for each and every profile. Make sure panelists know that, even though the profiles are ordered from lowest to highest score, their ratings do not need to be in strictly ascending order.
5. Tell panelists that, although they will be doing this task as a group, they do not need to come to consensus about the categorizations. Panelists should not feel compelled to change their ratings; we are interested in their **individual** best judgment.
6. Lead panelists through a step-by-step demonstration of how to fill in the rating form. Round 1 Ratings go under rating 1, etc. The rating form lists each student profile.
7. Answer questions the panelists may have about the work in Round 1.
8. Have the panelists begin by individually reviewing the set of profiles and making an initial judgment as to whether they feel each has been categorized appropriately according to the starting cut points.

9. Once the panelists have completed their individual review, the facilitator should lead the discussion for Round 1. During the Round 1 discussions, make sure all panelists have an opportunity to express their opinion and that no one panelist dominates the discussion.
    - Beginning with the first profile, indicate on chart paper how many panelists feel it belongs in each performance level category.
    - Proceed through the profiles one by one, repeating this process.
    - Beginning with the first profile for which there is disagreement as to how it should be categorized, have the panelists discuss their rationale for its placement and whether it has been categorized appropriately according to the starting cut points.
    - The conversation should focus on what the initial categorizations mean in terms of the abilities and skills of students at each performance level.
10. When the discussions are complete, have the panelists fill in the Rating 1 column on the rating form.
11. When you collect the rating forms carefully inspect them to ensure they are filled out properly.
    - ID number must be filled in.
    - Each student profile must have a single rating of 1, 2, 3 or 4.

V. Round 2

Overview of Round 2: During Round 2, the panelists will discuss the Round 1 categorizations of the profiles. Panelists will be given the room average cut point placements, based on the results of Round 1, as well as impact data indicating the percentage of students statewide who would fall into each performance level category based on the Round 1 ratings.

Activities:

1. Make sure panelists have the following materials:
    a. Ordered List of Performance Indicators
    b. Scoring Rubric
    c. Student Profile Packet
    d. Rating Sheet
    e. Visual Item Map
    f. Round 1 results (will be displayed on chart paper)
2. A psychometrician will review the Results of Round 1 information with the panelists:
    - The group average cut scores
    - The percentage of students in each performance level based on the group average cut scores
3. The facilitator will again lead the discussion for Round 2.
    - Using a show of hands, indicate on chart paper how many panelists assigned each profile to each performance level indicator.
    - Panelists should be given a few minutes to review the results. Encourage the panelists to use this information to assess how stringent or lenient a judge they are. If a panelist is consistently higher or lower than the group they may have a different understanding of the performance level definitions. It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the definitions.

- The facilitator will ask the panelists to review the student profiles in the areas of disagreement and lead a discussion of those profiles, starting with the one with the lowest score, and focusing on the placement of the cut points and what those placements mean in terms of the abilities and skills of students at each performance level.
- Each panelist should have a rationale for their placement.
- Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
- Panelists should discuss whether the percentage of students classified in each performance level "feels right". They should address the question: Does it make sense to the panelists to have XX% of the students in the *Advanced* level and YY% in the *Novice* level?
- In light of the additional information presented, if the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they should adjust their ratings to incorporate that information.

4. Following the discussion, each judge will review his or her placement of the cut points on the rating sheet. Panelists may change any or all of their placements in light of the group discussion, or they may choose to leave them where they initially placed them. It is not necessary to reach consensus during the standard setting process. This set of ratings constitutes Round 2 of the standard setting process.
    - When making revised ratings, panelists should not feel compelled to change their ratings. They will make their Round 2 ratings individually, as they did in Round 1.
5. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced to making a rating they disagree with.
6. As each panelist completes the task, collect the rating form from each. When you collect the rating forms carefully inspect them to ensure they are filled out properly
    a. The ID number must be filled in.
    b. Each student profile must have a single rating.

VI. Finalizing Recommendations for Performance Descriptors

1. Have panelists revisit the performance level descriptors and make any necessary adjustments or revisions, based on where they placed the cut points.
2. Panelist may
    - Clarify
    - Add more information
    - Add content specific detail
    - etc
3. Have panelists record changes as bullet points. Panelists do not have to agree on exact language.

VII. Repeat Steps II through VI for the second test

All standard setting activities, including reviewing the assessment materials, reviewing the performance level descriptors and developing bulleted lists of characteristics for each

performance level, Round 1 and 2 ratings, and finalizing recommendations for performance level descriptors, will then be repeated for the second test.

VIII. Complete Evaluation Form

After completing all standard setting activities for both tests, have panelists fill out the evaluation form. Emphasize that their honest feedback is important.

STANDARD SETTING REPORT

Appendix 5

Sample of Visual Item Map

Grade 05 Reading Visual Item Map

Rcum	R06	R16	R21	R11	R01	R18	R09	R10	R14	R08	R24	R22	R20	R07	R23	R17	R19	R12	R25	R04	R03	R02	R05	R13	R15
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99																									
98	4	4	4				1						1												
97				4					1							1		1			1	1	1		
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STANDARD SETTING REPORT

Appendix 6

Sample of Score Profile

Montana CRT-Alternate Assessment
Grade 5 Reading Student Profile 1
Total Score 8

	Suggested Activity and Student Work	Performance Indicator (Item)	**4**	**3**	**2**	**1**	**0**
1.	**Teacher will:** Display the reading material on the work space. ***"We are going to read a story about what Frank and his dad do on Saturdays. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Look toward the reader and/or show interest in the reading material.	Attend to person and literacy materials in a purposeful manner.					X
2.	**Teacher will:** Place the reading material on the work space. ***"We are going to read a story about two boys named Ed and Jeff. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Look toward the reader and/or show interest in the reading material.	Attend to a literacy activity in a purposeful manner.					X
3.	**Teacher will:** Place the reading material on the work space. ***"We are going to read a story about a boy who wanted to learn to swim. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Look toward the reader and/or show interest in the reading material.	Attend to person and literacy materials in a purposeful manner.					X
4.	**Teacher will:** Place the reading material on the work space. ***"We are going to read about the parts of plants that help them to grow. Show me that you are ready."*** Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Look toward the reader and/or show interest in the reading material.	Attend to person and literacy materials in a purposeful manner.					X

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
5.	**Teacher will:** Display the reading material on the work space. ***"We are going to read a poster advertising a bake sale. Show me that you are ready."*** Read poster to/with the student. Pause to explain words or concepts, pointing out the corresponding pictures in the text. Note: Teacher/student may refer to the reading material at any time during the assessment for help responding to an item. **Student will:** Look toward the reader and/or show interest in the reading material.	Attend to literacy materials from beginning to end.					X
6.	**Teacher will:** Place the word/picture symbols on the work space. Read the words with/to the student and describe the corresponding pictures. ***"Show me/tell me where the boys ate lunch."*** **Student will:** Indicate "kitchen." Scaffold: Level 3: Remove an incorrect response. Repeat the task request. Level 2: Remove another incorrect response. Repeat the task request. Level 1: *"The boys ate lunch in the kitchen."* Assist the student as needed to select the correct word/picture symbol.	Answer "where" questions about the story.				X	
7.	**Teacher will:** Place the sentence strip on the work space. Read the sentence with/to the student. ***"Look at the sentence. Show me/tell me which word is 'Exit.'"*** **Student will:** Indicate "Exit." Scaffold: Level 3: Cover an incorrect word. Repeat the task request. Level 2: Cover another incorrect word. Turn to page 5 in the storybook and point out the "Enter" and "Exit" signs. Repeat the task request. Level 1: Point to the word "Exit." *"This is the word 'Exit.'"* Assist the student as needed to select the correct response.	Identify environmental print in context.				X	
8.	**Teacher will:** Place the picture cards on the work space in random order. ***"Which picture shows Frank beside the store?"*** **Student will:** Indicate the picture showing Frank standing beside the grocery store. Scaffold: Level 3: Show the student the visual display of the word "beside." Remove an incorrect response. Repeat the task request. Level 2: Remove another incorrect response. Repeat the task request. Level 1: *"This picture shows Frank beside the grocery store."* Assist the student as needed to select the correct response.	Follow directions that contain a preposition.				X	

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
9.	**Teacher will:** Place the word/picture symbols on the work space. Read the words with/to the student and describe the corresponding pictures. ***"Show me/tell me which one will have the most information about plants."*** **Student will:** Indicate "science book." Scaffold: Level 3: Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"This science book will have the most information about plants."* Assist the student as needed to select the correct word/picture symbol.	Identify a resource to gain information.				X	
10.	**Teacher will:** Place the phrase/picture strips on the work space. Read the phrases with/to the student and describe the corresponding pictures. ***"What is one thing Frank and Dad do at the park that they do not do at the grocery store?"*** **Student will:** Indicate "play ball." **Evidence** Document sequence of student answers on Evidence Template Teacher Recording Sheet provided. Record student's final response on Frank and Dad Evidence Template provided. Scaffold: Level 3: Remove an incorrect response. Read the remaining phrases. Repeat the task request. Level 2: Remove another incorrect response. Read the remaining phrases. Repeat the task request. Level 1: *"Frank and his dad play ball."* Assist the student as needed to select the correct response.	Compare and contrast the impact of setting.					X
11.	**Teacher will:** Place the word cards on the work space but do not read them. ***"Show me/tell me which word is 'bubbles.'"*** **Student will:** Indicate "bubbles." Scaffold: Level 3: Remove the incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"This word is 'bubbles.'"* Assist the student as needed to sound out and/ or select the word "bubbles."	Use simple letter-sound association to decode unfamiliar words.			X		

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
12.	**Teacher will:** Read the story with/to the student. Pause to explain words or concepts, pointing out the corresponding pictures in the text. Place the picture cards on the work space in random order. Place the word card on the work space <u>but do not read it</u>. Point to the word card. ***"Show me/tell me which picture matches this word."*** **Student will:** Indicate the picture of a hand. <u>Scaffold</u>: <u>Level 3</u>: Remove an incorrect response. Review the remaining items. Repeat the task request. <u>Level 2</u>: Remove another incorrect response. Review the remaining items. Repeat the task request. <u>Level 1</u>: *"The picture of the hand matches this word."* Assist the student as needed to sound out the word and select the correct response.	Match pictures to printed words.					X
13.	**Teacher will:** Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"Show me/tell me what happened to Jeff's piece of cake."*** **Student will:** Indicate "Ed ate it." <u>Scaffold</u>: <u>Level 3</u>: Remove an incorrect response. Read the remaining sentences. Repeat the task request. <u>Level 2</u>: Remove another incorrect response. Read the remaining sentences. Repeat the task request. <u>Level 1</u>: *"Ed ate Jeff's piece of cake."* Assist the student as needed to select the correct sentence/picture strip.	Draw conclusions based on facts in the story.					X
14.	**Teacher will:** Read the story with/to the student. Pause to explain words or concepts, pointing out the corresponding pictures in the text. Display the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"Show me/tell me what Frank and his dad will <u>most likely</u> do next Saturday."*** **Student will:** Indicate "They will take a walk." **Evidence** Document sequence of student answers on Evidence Template Teacher Recording Sheet provided. Record student's final response on Frank and Dad Evidence Template provided. <u>Scaffold</u>: <u>Level 3</u>: Remove an incorrect response. Read the remaining sentences. Repeat the task request. <u>Level 2</u>: Remove another incorrect response. Read the remaining sentences. Repeat the task request. <u>Level 1</u>: *"Frank and his dad go for a walk every Saturday, so they will most likely take a walk next Saturday."* Assist the student as needed to select the correct response.	Make an appropriate prediction.					X

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
15.	**Teacher will:** Place the word/picture symbols on the work space. Read the words with/to the student and describe the corresponding pictures. ***"Show me/tell me which word has the same ending sound as the word 'fish.'"*** **Student will:** Indicate "splash." Scaffold: Level 3: Remove the incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"The word 'splash' has the same ending sound as the word 'fish.'"* Assist the student as needed to sound out and/ or select the word "splash."	Recognize consonant sounds.					X
16.	**Teacher will:** Read the story with/to the student. Pause to explain words or concepts, pointing out the corresponding pictures in the text. Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"Show me/tell me what happened at the beginning of the story."*** **Student will:** Indicate "Ed and Jeff ate lunch." Scaffold: Level 3: Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"At the beginning of the story, Ed and Jeff ate lunch."* Assist the student as needed to select the correct response.	Identify components related to the beginning of a reading selection.				X	
17.	**Teacher will:** Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"Show me/tell me what Ed and Jeff did before they climbed the tree."*** **Student will:** Indicate "They played ball." Scaffold: Level 3: Show the student the visual display of the word "before." Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"Before Ed and Jeff climbed the tree, they played ball."* Assist the student as needed to select the correct sentence/ picture strip.	Sequence events in simple stories.					X

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
18.	**Teacher will:** Read the article with/to the student. Pause to explain words or concepts, pointing out the corresponding pictures in the text. Place the word/picture symbols on the work space. Read the words with/to the student and describe the corresponding pictures. ***"Show me/tell me which part of the plant holds it up above the ground."*** **Student will:** Indicate "stem." Scaffold: Level 3: Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"The stem is the part of the plant that holds it upright above the ground."* Assist the student as needed to identify the stem.	Recall the name of a common object when given the function of the object.				X	
19.	**Teacher will:** "***A syllable is a part of a word. The word 'big'*** [tap work space lightly as the syllable is pronounced] ***has 1 syllable. The word 'pocket'*** [tap work space lightly as each syllable is pronounced] ***has 2 syllables."*** Place the word/picture symbols on the work space. Read the words with/to the student and describe the corresponding pictures. ***"Show me/tell me which word has 2 syllables."*** **Student will:** Indicate "teacher." Scaffold: Level 3: Remove the incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: "The word 'teacher' [tap as you pronounce each syllable] *has 2 syllables."* Assist the student as needed to select the correct word/picture symbol.	Identify syllables.					X
20.	**Teacher will:** Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"Show me/tell me what students must do before they can go to the bake sale."*** **Student will:** Indicate "Go to school." Scaffold: Level 3: Show the student the visual display of the word "before." Remove an incorrect response. Review the remaining sentences. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining sentences. Repeat the task request. Level 1: Read with/to the student the first two steps on the poster. *"Students must go to school before they can go to the bake sale."* Assist the student as needed to indicate the correct response.	Accurately order steps from a functional text.					X

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
21.	**Teacher will:** Read the poster with/to the student. Pause to explain words or concepts in the text. Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"What will the money from the bake sale be used to buy?"*** **Student will:** Indicate "The money will be used to buy books." Scaffold: Level 3: Remove an incorrect response. Review the remaining phrases. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining phrases. Repeat the task request. Level 1: *"The money will be used to buy books the students like best."* Assist the student as needed to indicate the correct response.	Use a resource to solve a problem or gain needed information.					X
22.	**Teacher will:** Place the phrase/picture strips on the work space. Read the phrases with/to the student and describe the corresponding pictures. ***"What is happening in the library between 10 and 2 o'clock?"*** **Student will:** Indicate "Bake sale!" Scaffold: Level 3: Remove an incorrect response. Review the remaining phrases. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining phrases. Repeat the task request. Level 1: Point to [or otherwise indicate] the phrase "Bake sale!" *"There will be a bake sale in the library."* Assist the student as needed to indicate the correct response.	Use a resource to solve a problem or gain needed information.					X
23.	**Teacher will:** Display the 4 types of reading material on the work space and help the student identify each one as literature or an informational resource. ***"Show me/tell me which one has information like the Bake Sale poster."*** **Student will:** Indicate the Car Wash poster. Scaffold: Level 3: Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: Indicate the Bake Sale poster. *"This tells us information about something that will happen in our community."* [Indicate the Car Wash poster.] *"This also tells us information about something that will happen in our community."* Assist the student as needed to indicate the Car Wash poster.	Demonstrate understanding of the difference between an information resource and literature.					X

	Suggested Activity and Student Work	Performance Indicator (Item)	4	3	2	1	0
24.	**Teacher will:** Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"All of these sentences come from this paragraph. Each one tells a detail about plants."*** Reread the paragraph on page 2 of the reading material with/to the student. ***"Show me/tell me which one is the most important detail in the paragraph."*** **Student will:** Indicate "But, most importantly, these parts help the plants live." Scaffold: Level 3: Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"This is the sentence that tells the most important information in the paragraph."* Assist the student as needed to select the correct response.	Select important details from reading materials.					X
25.	**Teacher will:** Place the sentence/picture strips on the work space. Read the sentences with/to the student and describe the corresponding pictures. ***"Show me/tell me which sentence tells the main idea/most important idea of the article/book."*** **Student will:** Indicate "All plants need the same parts to live." Scaffold: Level 3: Remove an incorrect response. Review the remaining items. Repeat the task request. Level 2: Remove another incorrect response. Review the remaining items. Repeat the task request. Level 1: *"The main idea of this article is that all plants need the same parts to live."* Assist the student as needed to select the correct sentence/picture strip.	Identify the main message of an expository reading selection.					X

STANDARD SETTING REPORT

Appendix 7

Rating Forms

Math Grade 3 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			6	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
2			14	4	4	0	4	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0		0				0
3			24	4	4	0	0	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1
4			32	0	4	4	0	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5			40	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6			44	4	4	4	4	4	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7			49	4	4	4	4	0	4	1	2	2	3	2	1	1	1	1	1	2	3	2	1	1	1	1	1	2
8			55	4	4	4	4	4	3	1	1	1	4	1	4	1	1	2	2	1	4	1	1	1	1	1	2	2
9			61	4	4	4	0	0	3	4	4	3	2	3	2	2	2	2	2	4	2	3	1	2	2	3	2	1
10			66	4	4	4	4	4	3	3	2	1	3	2	2	3	3	2	3	2	3	2	2	3	1	2	2	2
11			70	4	4	4	4	0	4	4	4	4	4	3	2	2	4	3	2	2	2	4	2	2	3	1	1	1
12			76	4	4	4	4	4	4	4	4	4	4	3	3	3	2	3	2	2	2	3	2	3	2	2	2	2
13			82	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	4	4	2	2	3	2	2	2	3
14			86	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	3	3	4	3	3	2	3	3	2	2
15			90	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	3	3	4	3	3	2	3	3
16			96	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3
17			99	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3

Math Grade 4 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1			13	4	4	4	1						0				0				0										
2			17	4	4	4	2			0	0		0				3				0										
3			31	4	4	4	1	1	1	0	1	1	0	1	1	1	1	1	0	1	1	0	1	0	1	1	0	1	1	1	1
4			36	4	4	4	4	3	0	4	4	0	3	3	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5			41	4	4	4	3	2	1	1	2	1	2	1	1	0	2	1	1	1	3	0	1	1	1	0	1	1	1	0	1
6			52	4	4	4	3	4	3	3	1	3	2	1	1	1	2	0	2	2	2	2	1	1	3	1	1	0	1	0	0
7			56	4	4	4	4	3	4	1	1	2	1	1	1	1	3	3	1	1	2	1	1	2	2	2	3	1	1	1	1
8			60	4	4	4	4	4	3	1	1	3	2	2	3	1	3	1	1	3	3	2	1	3	1	1	1	1	1	1	1
9			67	4	4	4	4	4	3	3	4	2	3	3	2	3	3	3	2	2	2	2	1	1	1	1	1	1	1	2	1
10			72	4	4	4	4	4	3	4	4	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	1	1	2	1	1	1
11			78	4	4	4	4	4	4	3	2	3	3	4	2	3	2	2	3	2	2	3	3	3	2	1	2	3	2	2	2
12			83	4	4	4	4	4	3	3	4	4	4	3	3	3	3	2	2	2	3	4	3	3	2	3	2	3	1	1	2
13			88	4	4	4	4	4	4	4	3	4	4	4	4	4	3	4	3	3	3	3	2	3	3	3	2	2	1	1	1
14			94	4	4	4	4	4	4	4	4	3	4	4	4	3	2	3	4	4	4	3	3	3	3	3	3	2	3	2	2
15			98	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	3	3	3	3	3	4	4	3	3	3	2	2
16			105	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	4	3	4	3	3	4	3	3
17			110	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2
18			112	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Math Grade 5 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			20	4	4	4	4	4	0	0	0	0	0	0	0	0	0		0	0	0			0	0	0		
2			26	4	4	4	4	4	1	0	1	0	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0
3			36	4	4	4	4	4	1	1		1	1	1	1		1	1		1	1	1		1	1	1	1	1
4			40	4	4	4	0	4	1	2	2	2	1	1	1	2	1	2	1	1	0	1	0	1	1	1	2	1
5			46	4	4	4	4	4	2	2	1	2	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1
6			52	4	4	4	4	4	2	3	3	3	2	2	1	1	1	3	2	1	1	1	1	1	1	1	1	1
7			56	4	4	4	4	4	3	3	4	2	1	1	2	2	3	1	1	1	2	1	2	2	1	1	2	1
8			60	4	4	4	4	4	1	1	3	2	2	3	2	2	3	2	3	2	3	2	1	2	1	1	2	2
9			65	4	4	4	4	4	3	3	2	4	3	3	3	3	3	3	2	2	2	1	1	2	1	2	1	1
10			70	4	4	4	4	4	3	3	2	2	3	2	3	2	3	2	2	3	3	2	3	2	1	3	3	3
11			74	4	4	4	4	4	3	3	2	3	3	3	3	3	3	3	3	3	3	2	3	2	3	3	2	1
12			78	4	4	4	4	4	4	4	3	3	4	3	3	3	3	3	2	3	3	3	3	2	3	3	2	1
13			83	4	4	4	4	4	4	4	3	3	4	3	3	4	3	3	3	2	3	2	4	3	4	3	2	3
14			87	4	4	4	4	4	4	4	3	3	4	3	4	3	3	3	4	4	3	3	3	4	3	3	3	3
15			92	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	3	4	3	3	4	4	3	3	3
16			97	4	4	4	4	4	4	3	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	3	4	4
17			100	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Math Grade 6 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			20	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2			28	4	4	4	4	0	1	0	1	1	1	1	1	1	1	1	0	1	0	0	1	0	1	0	0	0
3			38	4	4	4	4	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1
4			42	4	4	4	4	4	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
5			46	4	4	4	4	4	1	4	2	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1
6			51	4	4	4	4	4	4	1	4	4	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1
7			55	4	4	4	4	4	4	4	1	1	3	3	1	4	3	1	1	1	1	1	1	1	1	1	1	1
8			59	4	4	4	4	4	3	3	3	2	2	3	2	3	2	2	1	2	1	2	3	1	1	1	1	1
9			63	4	4	4	4	4	4	4	4	4	3	4	4	1	1	1	2	1	2	1	2	1	1	1	1	1
10			70	4	4	4	4	4	3	3	3	3	4	4	4	3	3	2	2	1	3	2	3	1	3	0	2	1
11			74	4	4	4	4	4	4	4	0	3	4	0	4	3	3	4	4	4	1	0	2	4	4	4	2	0
12			80	4	4	4	4	4	4	4	4	2	3	4	4	3	3	2	2	3	3	3	2	4	4	1	3	2
13			84	4	4	4	4	4	4	3	4	4	3	2	3	4	4	3	4	4	4	4	1	3	3	4	0	3
14			90	4	4	4	4	4	3	4	4	3	4	4	4	3	3	4	4	4	4	4	4	4	3	3	3	1
15			96	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3
16			100	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Math Grade 7 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			8	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2			20	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3			24	0	0	0	0	0	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
4			38	4	4	4	4	4	0	1	4	1	1	0	1	0	0	2	1	0	0	3	1	1	0	1	1	0
5			44	4	4	4	4	4	2	2	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
6			49	4	4	4	4	4	3	4	2	1	2	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1
7			57	4	4	4	4	0	2	4	3	4	4	3	0	4	2	3	4	0	3	0	0	1	0	0	0	4
8			62	4	4	4	4	4	3	4	3	3	3	3	2	2	2	3	3	1	2	2	1	1	1	1	1	1
9			66	4	4	4	4	4	3	2	3	2	2	3	3	4	3	2	2	3	1	2	2	2	2	2	1	2
10			72	4	4	4	4	4	3	3	4	3	3	3	3	3	2	3	1	2	2	4	3	2	2	3	2	1
11			76	4	4	4	4	4	4	4	4	4	4	4	3	3	2	1	3	4	4	3	1	4	1	1	1	1
12			81	4	4	4	4	4	4	3	4	3	3	4	4	4	4	3	3	4	2	3	2	3	3	2	2	1
13			87	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	2	3	3	2	2	3	1
14			90	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	4	4	4	4	3	2	3	3	3	2
15			95	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4	4	2
16			99	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3

Math Grade 8 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1			12	4	4	4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
2			16	4	4	4	4	0		0		0					0				0							0							
3			20	4	4	4	4	4		0		0		0			0				0	0						0							
4			27	4	4	4	0	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0
5			44	4	4	4	4	4	2	4	1	1	1	1		1	1	1		2	1	1		1	1	1	1	1		1		1			
6			52	4	4	4	4	4	1	3	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1
7			56	4	4	4	4	4	2	3	3	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1
8			64	4	4	4	4	4	1	3	2	3	1	1	3	1	3	2	3	1	3	1	2	1	0	1	1	3	1	1	2	1	1	1	1
9			74	4	4	4	4	4	4	4	3	2	3	2	2	2	2	1	2	2	2	1	2	3	2	2	3	1	1	2	1	1	1	1	2
10			79	4	4	4	4	4	2	3	3	3	4	2	2	2	3	2	1	2	3	4	3	2	2	3	1	3	1	2	0	2	2	1	1
11			88	4	4	4	4	4	4	4	3	3	3	3	4	3	3	2	3	2	3	2	2	2	2	2	3	2	2	2	2	2	2	1	2
12			93	4	4	4	4	4	3	4	4	4	3	4	3	3	4	3	3	3	2	3	2	2	3	2	2	3	2	2	1	2	2	2	2
13			98	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	2	2	3	3	2	3	2	2	2	2	1	2	1
14			102	4	4	4	4	4	4	3	4	4	4	4	3	4	4	4	3	3	3	3	3	3	3	3	3	2	2	3	2	3	2	1	2
15			106	4	4	4	4	4	4	3	4	4	4	4	4	4	3	4	4	4	2	4	3	3	2	3	2	3	3	3	3	3	2	3	1
16			113	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	3	4	3	3	3	3	3	2	3	3	3	2
17			119	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	3	4	4	4	4	3	3	2	3	3	3
18			124	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	4	4	4	4	4	3	4	3	4
19			128	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Math Grade 10 Rating Sheet

Rater ID_____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1			25	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2			30	4	4	4	4	4	4	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3			37	4	4	4	0	0	4	1	2	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1
4			49	4	4	4	4	4	4	2	0	2	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5			53	4	4	4	4	4	4	3	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6			60	4	4	4	4	4	4	3	3	1	3	2	2	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7			64	4	4	4	4	4	4	3	4	3	4	3	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8			68	4	4	4	4	4	4	4	3	4	2	3	3	3	3	1	2	1	1	2	1	1	1	1	1	1	1	2	1	1	0	1
9			74	4	4	4	4	4	4	4	3	4	3	3	4	3	2	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1
10			84	4	4	4	4	4	4	4	4	4	3	4	3	4	4	2	3	3	3	3	2	2	2	1	1	3	1	1	0	0	2	1
11			89	4	4	4	4	4	4	4	4	3	4	3	3	2	2	3	3	3	3	2	2	2	1	2	2	1	2	3	2	3	3	3
12			93	4	4	4	4	4	4	4	4	4	4	4	3	4	4	3	3	3	3	3	3	2	3	3	2	2	1	1	2	1	1	2
13			99	4	4	4	4	4	4	4	4	4	3	4	3	4	4	4	3	3	2	2	2	3	3	4	2	3	2	3	2	2	3	2
14			103	4	4	4	4	4	4	4	4	4	4	4	4	4	2	4	3	4	4	3	3	4	3	2	3	2	3	2	3	3	1	2
15			110	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	3	4	4	4	3	4	3	3	4	3	2	3	2	3	2
16			114	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4	4	3	4	3	3	3	3	3
17			120	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	4	4	4	3	4	3
18			124	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Reading Grade 3 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			18	4	4	4	0	0	1	0	1	0		0	1	0	1	0	0	1	1	0	0	0	0	0	0	0
2			32	4	4	4	4	4		0	4	4		0	0	0	4	0	0	0	0	0		0	0	0	0	
3			37	4	4	4	4	0	1	3	2	1	1	1	1	1	1	1	1	0	1	1	1	0	2	0	1	1
4			41	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1
5			45	4	4	4	4	4	2	4	4	4	4	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0
6			53	4	4	4	4	4	2	4	4	3	1	1	2	3	1	2	1	1	1	1	1	1	1	1	1	1
7			64	4	4	4	4	4	2	1	1	2	1	4	4	3	1	4	1	1	1	3	1	2	1	3	4	4
8			68	4	4	4	4	4	3	3	2	3	3	2	3	2	2	2	2	4	2	2	2	3	2	3	2	1
9			74	4	4	4	4	4	4	4	4	3	2	4	3	3	4	3	3	3	2	2	2	1	2	2	2	1
10			78	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	3	3	2	3	3	2	2	2	3
11			85	4	4	4	4	4	4	4	4	3	3	4	4	4	3	4	4	3	4	3	3	2	2	2	3	2
12			89	4	4	4	4	4	4	4	4	4	3	3	4	3	3	4	4	4	4	3	3	3	3	3	3	3
13			93	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4	3	2	3
14			97	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	3	3
15			100	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Reading Grade 4 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1			17	4	1	1	4	0	0	0	1	0	0	1	1	0	0	0	0	0	1	0	1	1	1
2			28	4	4	0	4	4	4	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0
3			38	4	4	2	4	4	4	4	1	4	4	1	2	0	0	0	0	0	0	0	0	0	0
4			52	4	3	4	4	4	4	4	2	3	4	1	1	1	1	2	2	2	1	1	2	1	1
5			55	4	4	4	4	4	4	4	3	4	4	4	1	3	1	3	2	1	1	0	0	0	0
6			58	4	4	4	4	4	4	4	4	3	4	1	1	3	2	4	2	1	1	1	1	1	1
7			61	4	4	4	4	4	4	0	4	2	4	4	3	4	1	3	3	2	1	3	1	1	1
8			64	4	4	4	4	4	4	4	4	2	4	4	4	4	2	0	1	1	2	4	1	1	2
9			69	4	4	4	4	4	4	0	4	4	4	3	4	3	4	0	3	3	3	3	3	2	2
10			72	4	4	4	4	4	4	4	4	4	4	3	3	3	4	2	3	3	3	3	1	2	2
11			75	4	4	4	4	4	4	4	4	3	4	4	3	2	4	3	3	4	3	3	2	3	2
12			78	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	3	4	4	3	2	2	2
13			81	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	3	3	3	3	3
14			84	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3
15			88	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Reading Grade 5 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			8	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0
2			20	4	4	4	4	4	0	0		0	0	0	0		0	0	0	0	0		0	0	0		0	
3			26	4	4	4	4	4	0	1	1	0	0	0	0		1	0	0	0	0		0	1	2	0	0	
4			34	4	4	4	4	4	0	1	2	1	1	0	0	0	1	0	1	0	1	0	1	2	1	1	0	1
5			40	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6			49	4	4	4	4	4	2	1	3	1	2	2	1	1	1	2	1	3	1	1	1	1	2	1	1	1
7			57	4	4	4	4	4	2	3	1	0	4	0	4	4	1	2	3	4	1	0	1	1	4	1	1	0
8			67	4	4	4	4	4	3	1	3	2	3	1	2	3	2	1	3	4	4	1	3	2	2	1	3	3
9			71	4	4	4	4	4	4	3	2	4	3	2	2	2	3	1	2	2	3	3	2	2	3	3	2	3
10			75	4	4	4	4	4	4	3	3	3	2	3	2	3	3	3	3	3	3	3	2	3	2	3	2	2
11			80	4	4	4	4	4	4	3	3	3	3	3	4	2	3	3	3	3	3	3	3	3	3	3	3	2
12			84	4	4	4	4	4	4	4	4	4	4	3	3	3	4	4	3	3	3	2	3	3	3	3	2	2
13			88	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	3	3	3	3	3	3	3	3	2
14			93	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	2
15			98	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3

Reading Grade 6 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			7	4	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2			20	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3			24	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4			28	4	4	4	4	4	1	2	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	1
5			40	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6			44	4	4	4	4	4	3	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1
7			50	4	4	4	4	4	4	2	1	1	1	3	1	1	1	3	1	2	1	1	2	1	1	1	1	1
8			59	4	4	4	4	4	4	3	1	1	3	4	2	3	3	1	2	3	2	1	1	1	1	1	1	1
9			63	4	4	4	4	4	4	2	4	3	3	1	4	4	0	0	0	1	2	3	2	2	4	0	3	1
10			68	4	4	4	4	4	3	3	3	2	3	3	2	2	3	3	2	2	2	3	2	2	2	1	3	2
11			77	4	4	4	4	4	4	4	4	2	3	2	2	3	3	3	4	3	4	4	3	1	2	2	1	3
12			81	4	4	4	4	4	4	4	4	3	4	3	3	3	3	3	3	3	3	3	2	3	3	3	2	2
13			91	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	3	4	3	4	2	4	2	3
14			94	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	3	3
15			97	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	3	4	3
16			100	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Reading Grade 7 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1			12	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2			28	4	4	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3			32	4	0	4	0	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4			36	0	0	0	4	4	2	1	2	1	1	3	1	1	1	2	2	1	2	1	1	2	1	1	1	1
5			40	4	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6			51	4	4	4	4	4	3	1	1	4	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1
7			56	4	4	4	4	4	4	4	2	2	3	1	1	1	2	1	1	1	1	1	2	1	1	2	2	3
8			60	4	4	4	4	0	3	3	1	3	2	3	2	4	3	2	2	1	2	1	4	2	2	1	2	1
9			64	4	4	4	4	4	3	2	3	2	1	3	2	3	2	4	3	1	2	1	4	1	2	2	1	2
10			68	4	4	4	4	4	4	3	3	3	2	3	1	2	2	3	2	4	2	1	2	4	1	3	1	2
11			77	4	4	4	4	0	4	4	4	3	4	3	4	3	2	2	1	3	4	2	3	2	3	3	4	3
12			82	4	4	4	4	4	4	3	2	4	3	3	3	3	3	2	3	4	3	4	4	2	2	2	4	4
13			86	4	4	4	4	4	4	3	4	4	4	3	4	4	3	4	3	3	4	3	3	2	2	3	3	3
14			90	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	3	3	3	2	3	2
15			95	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	3	4	3	3	3
16			99	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3

Reading Grade 8 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1			10	4	4		0	2			0	0				0											
2			22	4	4	4	4	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
3			30	4	4	4	4	1	1	0	4	1	3	0		0	1	0	1	0	0	0	0	0	0	1	1
4			35	4	4	4	4	4	2	2	0	2	0	1	0	1	0	2	2	1	0	0	2	0	0	0	0
5			51	4	4	4	4	3	2	4	0	4	4	4	4	4	0	0	0	0	1	0	0	1	4	0	0
6			56	4	4	4	4	3	2	2	0	4	4	2	1	2	2	2	2	1	1	1	4	2	1	2	2
7			60	4	4	4	4	4	3	3	4	1	3	4	1	4	1	4	1	3	1	1	1	2	1	1	1
8			65	4	4	4	4	4	4	4	0	4	2	4	1	3	3	2	4	0	4	3	1	1	1	0	4
9			69	4	4	4	4	3	3	4	4	2	2	3	2	3	4	3	3	3	3	2	2	2	1	2	2
10			74	4	4	4	4	4	3	3	4	4	4	3	3	4	3	2	3	3	3	2	1	1	4	1	3
11			78	4	4	4	4	4	4	4	4	4	3	4	4	4	4	3	4	3	3	2	2	1	2	1	2
12			83	4	4	4	4	4	4	4	4	3	4	4	4	4	3	3	4	3	3	3	2	3	3	3	2
13			87	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	3	3	2	3	2
14			92	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	3	4	3
15			96	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Reading Grade 10 Rating Sheet

Rater ID _____

Profile No.	Rating 1	Rating 2	Total Score	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1			9	4	4	0	0	0	0	0			0		0	1	0	0								0				
2			18	4	4	0	0	0	1	1	1	1	1	0	1	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0
3			31	4	4	4	4	4	2	2	1	0	1	1	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0
4			35	4	4	4	4	0	4	1	1	0	3	0	2	3	1	2	0	0	0	0	0	0	0	2	0	0	0	0
5			41	4	4	4	4	0	3	2	4	3	1	1	0	1	2	1	0	0	1	1	1	1	0	1	0	0	1	1
6			48	4	4	4	4	4	1	2	4	4	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
7			53	4	4	4	4	4	1	1	4	4	1	1	4	3	1	1	1	0	0	4	1	1	1	1	1	0	1	1
8			62	4	4	4	4	4	4	3	3	3	2	1	3	3	2	2	1	2	1	1	1	2	1	3	1	1	1	1
9			68	4	0	4	0	4	4	4	3	3	3	4	1	4	4	4	4	0	4	1	4	3	2	0	3	0	1	0
10			72	4	4	4	4	4	4	3	3	2	3	3	4	2	3	3	3	3	1	3	2	2	1	2	2	1	1	1
11			76	4	4	4	4	4	4	4	3	3	3	3	3	2	3	2	2	4	3	3	2	2	1	4	1	2	1	1
12			80	4	4	4	4	4	4	4	4	4	4	1	4	4	2	4	3	1	4	4	1	4	1	3	1	1	1	1
13			86	4	4	4	4	4	4	4	4	3	3	4	4	3	3	3	3	4	3	3	3	3	2	3	2	2	2	1
14			91	4	4	4	4	4	4	4	4	4	4	3	4	4	3	4	2	4	4	3	3	3	3	2	3	3	1	2
15			96	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	3	4	3	3	4	3	3	2	2	2
16			100	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	3	3	4	3	4	3	4	4	3	3
17			105	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	3	4
18			108	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

STANDARD SETTING REPORT

Appendix 8

Evaluation Form Results

MONTANA STANDARD SETTING
CRT-ALT June 2006
Evaluation Results
Overall

	Very Good	Good	Unsure	Poor	Very Poor		N
What is your overall impression of the process used to set performance standards for the Montana Alternate Assessment?	30	5	1	1			37
	Very Clear	**Clear**	**Somewhat Clear**	**Not Clear**			**N**
How clear were you with the achievement level descriptors?	16	15	5				36
	About Right	**Too little time**	**Too much time**				**N**
How would you judge the length of time of this meeting for setting performance standards?	30		7				37
What factors influenced the standards you set?	**Not at all Influential 1**	**2**	**Moderately Influential 3**	**4**	**Very Influential 5**	**Ave. Score**	**N**
The performance level descriptors		1	7	14	15	4.54	37
The assessment items			7	18	12	4.62	37
Other panelists		4	12	13	9	4.05	38
My experience in the field		4	6	10	18	4.36	38
	Definitely Yes	**Probably Yes**	**Unsure**	**Probably No**	**Definitely No**		**N**
Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?	14	21	1	1			37
How could the standard setting process have been improved?	See Grade Span/Content Area Results						
For each statement below, please circle the rating that best represents your judgment.	**Not at all Useful/Clear 1**	**2**	**3**	**4**	**Very Useful/Clear 5**	**Ave. Score**	**N**
The opening session was:		4	6	11	17	4.58	38
The performance level descriptors were:			8	15	15	4.84	38
Providing additional details to the performance level descriptors was:			3	15	20	4.81	38
The discussion with other panelists was:		1	2	4	30	4.95	37
The student portfolio rating task was:			1	17	20	4.63	38
The impact data at the beginning of round 2 was:			7	19	12	4.58	38
Please provide any additional comments or	See Grade Span/Content Area Results						

suggestions about the standard setting process.	

Reading 3-4

Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Definitely Yes
  - Much time and concentration was used to determine them.
- Probably Yes
  - We had a varied representation of educators. Within each round, there was some discrepancy for N, NP, P, and A but the variance was substantial.
  - We were all very close on all areas with no large deviations.

- Unsure
  - I was concerned that we had too many tests proficient and advanced (grade inflation hits testing!).

How could the standard setting process have been improved?

- Possibly weighing the test items would make using the cut scores easier to be understood by the educators.
- We would like "0" to not be in the novice category.
- The PowerPoint intros need to be edited to alleviate so much overlapping info (or is that the point?). A shortened/ streamlined version would work better.
- Our facilitator and our group worked very well together.
- More participants.

Please provide any additional comments or suggestions about the standard setting process.

- I am very concerned that the scoring guide is 0 to 4 (5 groups) but we only have 4 groups, forcing the 0 group into the novice group. That last group would be very different from novice. There must be a better way to do this.
- This experience has been quite beneficial to me. The process was well thought out, and oh-so-flexible within the structured tasks.

Math 3-4

Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Probably Yes
  - I felt we discussed/debated the profiles enough that I feel confident placing the cuts. However, there are many, many factors involved when these students are being tested. Some are distracted, medicated/not medicated that day, another student is too noisy… I could go on and on.
  - If felt we used a thoughtful, reflective approach in determining the individual/group consensus.

How could the standard setting process have been improved?

- This was a very good workshop and I learned a lot about setting standards.
- After the second day, it was much easier. We should have been able to go back and look at Grade 3 math.
- I felt we did better with the 4th grade cuts after having done the 3rd. So maybe a practice round?
- Have more of a set procedure and time to actually give background knowledge on relevance/authenticity of what we did and were to do. State the objective clearly. Follow a lesson plan format.

Please provide any additional comments or suggestions about the standard setting process.

- I guess we HAVE to do it, but I'm frustrated with the whole concept of trying to put highly unique individuals into categories based on doing tasks that may or may not be appropriate. I think we need to have Individual Assessments geared to each child's IEP.

Reading 5-6

Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Probably Yes
  - I feel that we discussed the process very thoroughly and the cut scores are a good representation of the students at each level.
  - Given the limited sample in Montana, setting and following specific criteria was more helpful.
  - Yes, because of group discussions and evaluation of data.

- Probably No
  - We found different cutes for both grade 5 and 6.

How could the standard setting process have been improved?

- More actual Montana student scores.

Please provide any additional comments or suggestions about the standard setting process.

- Thank you. Pat was very helpful in effectively facilitating this process
- The process of the tasklets was appropriate (right amount of time). Team was great!

Math 5-6

Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Definitely Yes
  - We rate our cut scores twice. We also had time to discuss our decisions for cut scores.

- Probably Yes
  - I think that the line between Nearing Proficient and Proficient is still in question.
  - The set scores were very close to what we came up with on our cuts.

How could the standard setting process have been improved?

- All went great.
- This was a good process. Working as a group made making decisions more real.

Please provide any additional comments or suggestions about the standard setting process.

- Terrific situation. Moderator was personable and superb to work with.

Reading 7-8

Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Definitely Yes
  - The cut scores were correctly placed based on standards as applied to the developed descriptors and actual test profiles.
  - Yes, because we individually and as a group cut the scores and were thoughtful of this process.

- Probably Yes
    - We were very close to last year's information (not that we had to be), and our scores were comparable to bell curve or typical curves.
    - I feel confident overall. Proficient range could be a bit narrow.

How could the standard setting process have been improved?

- Nothing as far as I can determine.
- This was my first time participating in standard setting so I was completely new to the process. I was relieved to see the process so well lined out. It made the process go smoothly.
- I'm not sure how. It was set up very well. Maybe having more people involved, but I feel that the 5 people in my group were of high quality.

Please provide any additional comments or suggestions about the standard setting process.

- Very nice not having to be worried about consistent consensus. This time spent is very valuable in the process of meeting other educators and being part of the success of education in Montana.

Math 7-8
Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Definitely Yes
    - We followed the test criteria and based our decisions from this; looking at specific questions and how the student answered (responded
    - Yes, we had good discussions and listened to one another.
    - We all seemed to have the background in math and special ed for realistic reasons for why we made our decisions.
    - We were deliberate and thoughtful, debated issues of question or concern, and set them accordingly.

How could the standard setting process have been improved?
- More teachers need to be involved, but that's not your fault.
- See if what you're measuring is being, or has been, taught, in the classroom

Please provide any additional comments or suggestions about the standard setting process.

- Our round 2 impact data didn't change. I guess that's good because we were on the same page.
- This was enlightening- I wonder if statistics are compared between the regular CRT and the Alt CRT as to percent of students scoring in each category (N,NP,P,A) and are they similar? Should they be?

Reading and Math 10
Do you believe the cut scores set by the panel are correctly placed on the assessment score scale?

- Definitely Yes
    - We took our job seriously; compiled the numbers and looked back at the questions.
    - I thought the process was very appropriately designed to get valid results
- Probably Yes
    - As a "dry set of information the scores were OK with a narrative of test items (back pages) would scale different.
    - The relatively small number of respondents- some questions on the test not appropriate.
    - Some of the cut scores were very close, so for a small sample, my confidence is not 100 percent.

How could the standard setting process have been improved?
- More people who had given the test and general ed and admin and spec ed.
- I would like to have more info about actual test in reading- harder for me to interpret with out samples of "objects", "cards", "pictures", etc.

- I would like to see a video of the math assessment being given along with the reading video
- This is my first contact with setting standards so am unsure if or how process could be improved. Hesitate to give an opinion when I'm short on experience.
- I like the review. The video clip was helpful and grade level clips may prove to be additional help in representing the more severe testing individuals.
- More understanding by those who don't know what special ed is or what population is being tested. Obviously some members didn't observe enough via the videos.

Please provide any additional comments or suggestions about the standard setting process.

- Lots of patience on Sue's part! Great job!
- There were errors on profile ranking- turned out we caught it and adjusted, but made me lack confidence in what we might not have caught
- Always a learning experience!
- Great group
- The conference was excellent. Susan was truly professional in her presentation and facilitation. I learned so much about the process and many of my negative opinions were changed by the experience. Thank you!
- Thank you for running an enjoyable meeting.

APPENDIX D

CRT-ALTERNATE PERFORMANCE LEVEL DESCRIPTORS, SCALED SCORES AND RAW SCORES

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Alternate Performance/Achievement Descriptors for Grade 3 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • creates a repeating pattern using objects, shapes, designs, or numbers • carries out a strategy to solve problems involving patterns, relations, or functions • recognizes 2-dimensional shapes • carries out a strategy to solve a geometric problem • determines which of two numbers is closer to the quantity in a given set • uses methods and tools to solve a problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator • identifies a reasonable quantity when guessing the amount of a given set
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • extends and explains an alternating pattern of two or more objects, shapes, designs, or numbers • shows a quantity • extends or supply a missing element in a repeating pattern by attribute or number • reproduces an alternating pattern of two or more objects, shapes, designs, or numbers • recognizes properties of two-dimensional shapes • uses a quantitative label when making a guess • touches and moves shapes toward creating new shapes

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates an understanding that numbers, as opposed to letters, are used to express quantity, order, or size/amount • counts with another person, • identifies/names shapes as circles, squares, triangles, rectangles, and ovals • matches two- dimensional physical shapes to pictures of the shapes in different orientations • explains/shows spatial reasoning • finds various shapes in the environment • enters numbers correctly on a calculator/writes (communicates) numbers correctly
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • attends to another person combining and subdividing shapes • attends to another person making patterns and to a person describing patterns • attends to a person demonstrating with concrete materials. • attends to objects or pictures of two- and three- dimensional geometric shapes and the relationships among them • attends to another person estimating an amount of a given set

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Alternate Performance/Achievement Descriptors for Grade 3 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • follows 3 step or more directions • chooses correct choice among the 4 options correctly • asks for clarification/help if needed • gives full attention to literacy materials/selection • communicates using expanded vocabulary • correctly answers who, what, and where questions and contributes own thoughts/ideas • is able to generalize information from one setting to another • responds with a complete thought • recognizes and articulates the main idea
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • follows 2 step directions • attends fully to the activity • contributes/elaborates on the response • shows independence/confidence • chooses correctly among three options (verbal, pictures, touch, other stimuli) • participates actively • understands what he/she is doing • cooperates with the administrator • addresses responses with Yes or No • communicates and demonstrates words he/she knows and asks for clarification if needed • attends long enough to complete a given task • attempts to answer what and where questions

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • explores literary items (holds book in correct position, recognizes pictures vs. print, uses left to right orientation • attends with support easily • begins to respond to literacy with varied prompts • responds to others • holds eye contact • begins to communicate with a purpose • communicates the correct choice between two options • followsone step direction consistently
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity. • attends to materials being displayed. • responds to own name • attends for a short period of time • begins/attempts to participate with supports • attempts to communicate

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Alternate Performance/Achievement Descriptors for Grade 4 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • computes with addition • communicates relationships between categories • extends a pattern • explains reasoning about probability items • creates a pattern • computes with subtraction. • extends a growing pattern • describes characteristics • makes accurate predictions • estimates
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • represents data • compares categories • extends an alternating pattern • applies a number/word to a quantity of objects in a collection (few/many, one/many, more/less) • creates a repeating pattern • sets up a graph (i.e. labels axes) • makes a bar graph. • determines which number is closer to a quantity in a given set • predicts outcomes of a chance event • describes or recognizes characteristics of categories • has knowledge of vocabulary • sets up a bar graph with labeling • compares/contrasts quantity with manipulatives • answers questions about a graph

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • finds the category with the most/least. • demonstrates one-to-one correspondence between, up to 12 objects and counting numbers (rational counting) • uses final number as quantity of a set • answers questions about a graph • counts using sequential order of numbers • extends alternating patterns • understands one-to-one correspondence • knows quantity of a set • represents/Records data by number or tally mark • counts to 15 in order • sorts/categorizes
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates the beginning of a math activity • attends to materials being displayed • attends to another person demonstrating a procedure • demonstrates the concept of 1 • sorts objects into categories • attends to a person recording • attends to a task • readies self • attends to teacher

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Alternate Performance/Achievement Descriptors for Grade 4 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • responds accurately and communicates knowledge with expanded vocabulary • chooses correctly among four options • communicates a complete thought related to topic or concept being tested • answers correctly "what", "when" and "where" questions • attends to literary materials from beginning to end • asks for help • identifies and communicates/shares main idea of literacy materials to others • grasps new ideas and words and applies them • follows multi-step directions
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • follows two-step directions • interacts independently with purpose • communicates knowledge of basic vocabulary • demonstrates written word has meaning • chooses correctly among three options • attends adequately to literacy materials • answers yes and no questions about information in print and non-print materials • answers "who" questions • identifies beginning main idea • uses educational literacy materials appropriately

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • communicates the correct choice between two options • attends and responds to literacy materials appropriately with support • follows one-step directions • explores pictures, symbols and objects when presented • displays knowledge of front/back, right side up, page turning and scanning of literacy materials • uses prior knowledge to demonstrate knowledge of basic vocabulary
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • begins to participate with support • attends for short periods to the teacher, materials, and literacy tasks • acknowledges the literacy activity • responds to own name • attends to pictures, symbols, objects when presented

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Alternate Performance/Achievement Descriptors for Grade 5 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • recognizes 0-100 independently • requires no clarification or prompts • demonstrates mastery of basic math concepts • demonstrates mastery of math vocabulary • solves problems using addition & subtraction • uses measurement tools • responds to test questions
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • recognizes 0-100 • discriminates correctly between 3 choices • begins to understand words that indicate operations in word problems • demonstrates a basic understanding of sequencing • demonstrates basis understanding of math skills • demonstrates a basic understanding of math concepts and vocabulary
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates a limited understanding of math concepts • demonstrates a limited understanding of math vocabulary • demonstrates a limited ability to generalize • demonstrates a limited ability to master a specific task in a specific environment • uses patterns to copy concrete patterns using manipulatives • recognizes digits 0-20 • demonstrates 1:1 correspondence • demonstrates single digit addition, i.e. less than 9
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • demonstrates an understanding of the concepts of some/more/ less/take away/all gone/ no more • select the appropriate tool to be used in making a measure

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Alternate Performance/Achievement Descriptors for Grade 5 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • relates and uses relevant prior knowledge to make connections • uses pictures, symbols, and objects independently in problem solving • responds to test materials to respond to a specific item • gives correct response among four options • orients text and reads independently and with teacher • communicates the correct choice with multiple options • responds to basic comprehension questions • sounds out unfamiliar words using phonics
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • relates prior knowledge accurately and appropriately • explores pictures, symbols and objects • needs occasional re-direction to the test materials to respond to a specific item • responds to test materials to respond to a specific item • orients text and uses text with limited prompting • communicates the correct choice among three options • responds to basic comprehension questions given three options • sounds out unfamiliar words using phonics with assistance
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • understands when response is needed • displays knowledge of front/back, rights side up, page turning and scanning of literacy materials with prompting • communicates the correct choice between two options • explores pictures, symbols, and objects when prompted • needs multiple re-direction to the test material to respond to a specific item • relates prior knowledge to present situation • sounds out unfamiliar words using limited phonemic knowledge • responds to basic comprehension questions using yes or no
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • explores pictures, symbols, and objects with teacher assistance • responds when given modeling and supports • recognizes phonemic correspondence when modeled • attends and acknowledges literacy activities

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Alternate Performance/Achievement Descriptors for Grade 6 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • demonstrates mastery understanding of abstract math concepts and skills • demonstrates mastery of telling time to the one half hour and hour and applies the concepts of time • demonstrates mastery on the ability to perform visual/special reasoning • demonstrates mastery on the ability to sequence numbers and/or patterns • demonstrates mastery on the understanding and use of math vocabulary • consistently demonstrates the ability to generalize knowledge and skills to different environments
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • discriminates correctly among three choices • demonstrates a basic understanding of abstract math concepts and skills (addition and subtraction) • tells time to the one half hour and hour and applies concepts of time • demonstrates a basic ability to perform visual/special reasoning with minimal prompts • demonstrates a basic understanding of sequencing • student demonstrates a basic understanding of and the ability to use math vocabulary • demonstrates the ability to generalize knowledge and skills to different environments a with some supports
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • responds accurately when choosing between two answers • demonstrates a limited understanding of abstract math concepts and skills • demonstrates a limited ability to tell time or apply the concepts of time • demonstrates a limited ability to perform visual/special reasoning • requires concrete manipulatives when creating a pattern • demonstrates a limited understanding of math vocabulary • demonstrates a limited ability to generalize knowledge and skills to different environments
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • demonstrates the ability to cover a figure with shapes • produces a numeral to 10

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Alternate Performance/Achievement Descriptors for Grade 6 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • orients text and reads independently or with teacher • communicates the correct choice with multiple options • uses diagrams and models to understand text independently • creates diagrams and charts to show understanding of text • relates text to appropriate personal experiences • identifies meaning of unfamiliar words using context clues • responds to basic questions about plot outcome • demonstrates basic understanding of main ideas and some supporting details • recognizes diverse perspectives
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • orients and uses text • communicates the correct choice among three options • uses diagrams and models to understand text with limited prompting • creates diagrams and charts to show understanding of text • relates text to appropriate personal experiences • identifies meaning of unfamiliar words using context clues • responds to basic questions about plot outcome • demonstrates basic understanding of main ideas and some supporting details • recognizes diverse perspectives

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • understands when response is needed • displays knowledge of front/back, rights side up, page turning and scanning of literacy materials with prompting • communicates the correct choice between two options • uses diagrams and models to understand text • creates diagrams and charts to show understanding of text • relates text to personal experiences • identifies meaning of unfamiliar words using context clues • responds to basic questions about plot • demonstrates basic understanding of main ideas and some supporting details • recognizes diverse perspectives
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • orients text • acknowledges correct choice • attends to teacher-created diagrams and models to understand text • connects text to personal experience only with teacher guidance • acknowledges and attends to literacy activity

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Alternate Performance/Achievement Descriptors for Grade 7 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • engaged in the task • understands 1:1 correspondence • adds/counts money • graphs • sorts and makes decisions based on sorting
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • identifies coins and values • sorts objects by function • makes comparisons (>,<) • makes a statement about the data • adds and subtracts
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • knows 1:1 correspondence, concept of "none" • understands the concept addition (more) • understands the concept subtraction (less) • matches coins • sorts by appearance, various (two or more) characteristics (size, shape, color)
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity • attends to materials being displayed • attends to models/prompts • recognizes numbers (symbol or rote recitation) • sorts by one characteristic

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Alternate Performance/Achievement Descriptors for Grade 7 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • makes inferences • sequences beginning, middle, and end and supporting details (specific facts) • differentiates between fact and opinion • understands abstract vocabulary (true/false) • identifies/understands various genre (i.e. cultural lessons, informational, fables/myths, biographies) • understands story lessons/author's purpose • identifies chapter heading (abstract sense) to find/use info • uses reading strategies to gain information (i.e. rereading, use of key words, use of features of text)
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • demonstrates readiness with limited/no prompting • sequences beginning, middle, and end • recalls multiple facts about a reading selection • understands literal vocabulary and the relationships • identifies main idea of the story and some supporting facts/details • identifies purposes of various texts (i.e. map, dictionary, bus schedule, etc.) • identifies title and basic parts of a book • responds with three response options

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates readiness by following one-step directions or with teacher modeling/prompting • identifies an object and its function • maintains focus from beginning to end • understands story beginning and ending • understands basic main idea (answer with one picture/short response) • recalls at least one fact about a reading selection • locates name of book and basic print awareness • responds mostly through basic yes/no questions or with two (or three options with further teacher clarification) options
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • directs attention to external stimuli when requested (i.e. turns head in direction, sits quietly, etc.) • interacts with stimuli • responds to external stimuli (i.e. nods head, operates switch, points to, etc.) • is assisted through a correct response • attempts to participate in activity • has general awareness of people and activity • responds to own name • responds to words, pictures and symbols

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Alternate Performance/Achievement Descriptors for Grade 8 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • measures to the inch • has basic concept of perimeter • has concept of fractions- demonstrates 1/2 • has Algebra concepts • identifies functions (problem solving) • labels both sets of data • explains conclusions drawn from graph (decision making) • remains actively engaged and may initiate some interaction with instructor during testing • consistently arrives at correct answer • applies beginning connections between concrete and symbolic representations, operations, measurement, graphing and problem solving strategies
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • understands concept that a ruler is used to measure distance • reads simple measurements (1/2, 1/4) • demonstrates calculator skills • counts by (2,5,10) • fills in data on a graph • makes correct responses from 3 choices (given/prompt) • demonstrates beginning connections between concrete and symbolic representations, operation (+/-), measurement and graphing

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • demonstrates solid number concept for 1:1 • can count single digits • can add/subtract single digits • communicates understanding of beginning connections between concrete and symbolic representations.
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity. • attends to materials being displayed. • engages with instructor with prompts

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Alternate Performance/Achievement Descriptors for Grade 8 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • locates title and other information from a variety of documents/sources • distinguishes/identifies fact and opinion • identifies and uses reference/resource materials to gain information about words and their function • recognizes vowel letter-sound • uses reading strategies to gain information (i.e. rereading, use of key words, use of features of text) • responds independently • reads and comprehends a paragraph • records facts • identifies main idea • connects prior knowledge to make meaning of text • identifies vowels • is able to use various forms of communication to express self
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • identifies a word/picture/symbol for content communication (identify topic that was chosen previously) • locates/identifies title and other parts of a book • identifies facts (i.e. main idea, supporting details) • uses reference materials to gather information for a research project • responds with three response options (a range of options) • produces name • has basic word recognition • has beginning reading skills • understands that groups of words contain meaning and can gain meaning from print • identifies a variety of materials and their uses • navigates environment • is able to engage in conversation using varying techniques • has a firm grasp of sound/symbol association • identifies words from sentences • tracks while reading • identifies own learning style

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • recognizes name in print/object/symbol • identifies letters by name/sign • indicates a preference/choice • indicates a word in a sentence • use auditory/visual scanning to maintain place • identifies a word/picture/object of familiar places and people • locates library/reference center/media center • responds mostly through basic yes/no questions or with two (or three options with further teacher clarification) options • identifies preference • understands when response is needed • makes choices between two or three options • recognizes difference between letters and other symbols (e.g. numerals) • orients text (top to bottom) • "reads" left to right • differentiates between materials and objects • places answers in correct location with appropriate tools • understands roles of people in environment • follows routines and procedures • recognizes that letters have names and is aware of letter sounds • has awareness of print and organization of print on the page
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity. • attends to materials being displayed. • responds to name • participates in activity • demonstrates readiness by following one-step directions or with teacher modeling/prompting • identifies writing tools/common objects, words/pictures/symbols • requires high level of teacher direction • directs attention to external stimuli when requested (i.e. turns head in direction, sits quietly, etc.) • interacts with stimuli (i.e. teacher, words, pictures, and symbols) • responds to external stimuli (i.e. nods head, operates switch, points to, etc.) • makes eye contact • attempts to participate in activity • directs attention to stimuli • interacts with stimuli • has general awareness of people and activity • responds to own name • responds to words, pictures and symbols

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Linda McCulloch
Superintendent

Alternate Performance/Achievement Descriptors for Grade 10 Math

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • generalizes very basic information • completes 2 to 3 step processes of addition and subtraction • applies beginning connections between concrete and symbolic representations by using a table to draw conclusions • responds on nearly every task • generalizes and adept in formation and skills • explains how and why he/she arrived at A + A solution
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • chooses correct procedures to solve simple number problems • uses and complete and/or extend very basic patterns of data to make decisions • is able to demonstrate beginning connections between concrete and symbolic representations • models math problems • uses and completes or extends patterns of data to make decisions • makes basic computations • applies information
Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • recognizes properties of limited (square/circle) 2-dimensional shapes • understands quantity • matches and identifies
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a math activity. • attends to materials being displayed. • attends to a person and/or task • shows limited understanding of quantity when given 2 choices

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Superintendent

Alternate Performance/Achievement Descriptors for Grade 10 Reading

Advanced	The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content-specific performance indicators. • understands basic abstract symbols • selects main idea from a selection read aloud • identifies appropriate resources for gaining specific information • identifies similarities and differences • combines information from two or more resources • independently responses on nearly every task • uses auditory/visual scanning • uses text features (sequential) • identifies appropriate informational resource to gain specific information • identifies word/picture/symbol and object used for content • selects literacy materials by character or topic • identifies the main idea • rereads to gain understanding
Proficient	The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators. • has a beginning understanding of abstract symbols • communicates an opinion • demonstrates understanding of difference between information • uses prior knowledge • is beginning to identify appropriate resources for gaining specific information • identifies words/pictures/symbols and objects that are new and unfamiliar • indicates adaptations needed to understand text • demonstrates an understanding/awareness of prior knowledge of concept

Nearing Proficiency	The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content-specific performance indicators. • indicates preferences • begins to use access to prior knowledge • begins to use auditory and/or visual scanning skills • may be able to match and identify words/pictures/ symbols/objects • displays knowledge of direction • locates picture/object/symbol • identifies words/pictures/symbols and objects • communicates an opinion • identifies resources
Novice	The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators. • anticipates a reading activity • attends to materials being displayed • attends to a person and/or task • interacts with stimuli (i.e. teacher, words, pictures, and symbols) • responds to external stimuli (i.e. nods head, operates switch, points to, etc.) • makes eye contact • attempts to participate in activity • directs attention to stimuli • interacts with stimuli • has general awareness of people and activity • responds to own name • responds to words, pictures and symbols

CRT-Alt Cut Scores 2006				
grade	subject	cut1	cut2	cut3
03	MAT	75	88	98
03	REA	40	74	95
04	MAT	54	73	107
04	REA	51	69	84
05	MAT	72	81	98
05	REA	48	74	88
06	MAT	60	89	98
06	REA	43	68	93
07	MAT	42	69	96
07	REA	32	59	88
08	MAT	57	83	107
08	REA	60	77	90
10	MAT	66	97	116
10	REA	53	75	100

CRT-Alt Scaled Scores 2006				
Grade	subject	cut1	cut2	cut3
03	MAT	225	250	269
04	MAT	225	250	295
05	MAT	225	250	297
06	MAT	225	250	258
07	MAT	225	250	275
08	MAT	225	250	273
10	MAT	225	250	265
03	REA	225	250	265
04	REA	225	250	271
05	REA	225	250	263
06	REA	225	250	275
07	REA	225	250	277
08	REA	225	250	269
10	REA	225	250	278

APPENDIX E
CRT-ALTERNATE RELEASED PERFORMANCE INDICATORS

Mathematics - Grade 3		
Item	**Performance Indicator**	**Standard**
1	Attend to a person demonstrating with concrete materials.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
2	Demonstrate an understanding that numbers, as opposed to letters, are used to express quantity, order, or size/amount.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
3	Count with another person.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
4	Show a quantity.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
5	Enter numbers correctly on a calculator/ write numbers correctly.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
6	Attend to another person combining and subdividing shapes.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
7	Touch and move shapes toward creating new shapes.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
8	Recognize properties of 2-dimensional shapes.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
9	Find various shapes in the environment.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
10	Produce 2-dimensional shapes. Carry out a strategy to solve a geometric problem.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 4: Students demonstrate understanding of shape and ability to use geometry.
11	Attend to objects or pictures of two- and three-dimensional geometric shapes and the relationships among them.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
12	Identify (name) shapes as circles, squares, triangles, rectangles, and ovals.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
13	Sort 2-dimensional physical shapes according to their shape.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
14	Recognize 2--dimensional physical shapes as being the same (congruent) or different.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
15	Match 2-dimensional physical shapes to pictures of the shapes in different orientations. Explain/show spatial reasoning.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 4: Students demonstrate understanding of shape and ability to use geometry.

16	Attend to another person estimating an amount in a given set.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
17	Use a quantitative label when making a guess.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
18	Identify a reasonable quantity when guessing the amount in a given set.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
19	Use methods and tools to solve a problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
20	Determine which of two numbers is closer to the quantity in a given set.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
21	Attend to another person making patterns and to a person describing patterns.	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
22	Extend or supply a missing element in a repeating pattern by attribute or number.	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
23	Extend and explain an alternating pattern of two or more objects, shapes, designs, or numbers.	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
24	Reproduce an alternating pattern of two or more objects, shapes, designs, or numbers.	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
25	Create a repeating pattern using objects, shapes, designs, or numbers. Carry out a strategy to solve problems involving patterns, relations, or functions.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.

Reading - Grade 3		
Item	**Performance Indicator**	**Standard**
1	Attend to a person demonstrating with concrete materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Demonstrate an understanding that numbers, as opposed to letters, are used to express quantity, order, or size/amount.	Standard 2: Students apply a range of skills and strategies to read.
3	Count with another person.	Standard 2: Students apply a range of skills and strategies to read.
4	Show a quantity.	Standard 2: Students apply a range of skills and strategies to read.
5	Enter numbers correctly on a calculator/ write numbers correctly.	Standard 2: Students apply a range of skills and strategies to read.
6	Attend to another person combining and subdividing shapes.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
7	Touch and move shapes toward creating new shapes.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Recognize properties of 2-dimensional shapes.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Find various shapes in the environment.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Produce 2-dimensional shapes. Carry out a strategy to solve a geometric problem.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
11	Attend to objects or pictures of two- and three-dimensional geometric shapes and the relationships among them.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Identify (name) shapes as circles, squares, triangles, rectangles, and ovals.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
13	Sort 2-dimensional physical shapes according to their shape.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Recognize 2-dimensional physical shapes as being the same (congruent) or different.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
15	Match 2-dimensional physical shapes to pictures of the shapes in different orientations. Explain/show spatial reasoning.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.

16	Attend to another person estimating an amount in a given set.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
17	Use a quantitative label when making a guess.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
18	Identify a reasonable quantity when guessing the amount in a given set.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
19	Use methods and tools to solve a problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
20	Determine which of two numbers is closer to the quantity in a given set.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
21	Attend to another person making patterns and to a person describing patterns.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
22	Extend or supply a missing element in a repeating pattern by attribute or number.	Standard 2: Students apply a range of skills and strategies to read.
23	Extend and explain an alternating pattern of two or more objects, shapes, designs, or numbers.	Standard 2: Students apply a range of skills and strategies to read.
24	Reproduce an alternating pattern of two or more objects, shapes, designs, or numbers.	Standard 2: Students apply a range of skills and strategies to read.
25	Create a repeating pattern using objects, shapes, designs, or numbers.Carry out a strategy to solve problems involving patterns, relations, or functions.	Standard 2: Students apply a range of skills and strategies to read.

Mathematics - Grade 4		
Item	**Performance Indicator**	**Standard**
1	Attends to another person demonstrating a procedure.	Standard 1: Problem Solving
2	Anticipates the beginning of a math activity.	Standard 1: Problem Solving
3	Attends to materials being displayed.	Standard 1: Problem Solving
4	Demonstrates the concept of one.	Standard 2: Numbers and Operations
5	Applies a number/word to a quantity of objects in a collection (few/many; one/many).	Standard 2: Numbers and Operations
6	Determines which number is closer to the quantity in a given set.	Standard 2: Numbers and Operations
6	Determines which number is closer to the quantity in a given set.	Standard 1: Problem Solving
7	Counts using a sequential order of numbers.	Standard 2: Numbers and Operations
8	Demonstrates one-to-one correspondence among up to 12 objects and counting numbers (rational counting).	Standard 2: Numbers and Operations
9	Uses final number as quantity of a set.	Standard 2: Numbers and Operations
10	Sorts objects into categories.	Standard 6: Data Analysis, Probability, and Statistics
11	Attends to another person collecting and recording data.	Standard 6: Data Analysis, Probability, and Statistics
12	Represents data.	Standard 6: Data Analysis, Probability, and Statistics
13	Sets up graph (i.e., labels axes).	Standard 6: Data Analysis, Probability, and Statistics
14	Sets up graph (i.e., labels axes).	Standard 6: Data Analysis, Probability, and Statistics
15	Makes a bar graph.	Standard 6: Data Analysis, Probability, and Statistics
16	Finds the category with the most/least.	Standard 6: Data Analysis, Probability, and Statistics
17	Answers questions about a graph.	Standard 6: Data Analysis, Probability, and Statistics
17	Answers questions about a graph.	Standard 1: Problem Solving
18	Compares categories.	Standard 6: Data Analysis, Probability, and Statistics
18	Compares categories.	Standard 1: Problem Solving
19	Describes characteristics of categories.	Standard 6: Data Analysis, Probability, and Statistics
19	Describes characteristics of categories.	Standard 1: Problem Solving
20	Communicates relationships between categories.	Standard 6: Data Analysis, Probability, and Statistics
20	Communicates relationships between categories.	Standard 1: Problem Solving
21	Computes addition.	Standard 2: Numbers and Operations
22	Computes subtraction.	Standard 2: Numbers and Operations
23	Predicts outcome of a chance event.	Standard 6: Data Analysis, Probability, and Statistics
24	Explains reasoning about probability problems.	Standard 6: Data Analysis, Probability, and Statistics
24	Explains reasoning about probability problems.	Standard 1: Problem Solving
25	Extends an alternating problem.	Standard 7: Patterns, Relations, and Functions
26	Creates a repeating problem.	Standard 7: Patterns, Relations, and Functions
27	Extends a growing pattern.	Standard 7: Patterns, Relations, and Functions
28	Creates a growing pattern.	Standard 7: Patterns, Relations, and Functions

Item correlates with 2 standards

Reading - Grade 4		
Item	**Performance Indicator**	**Standard**
1	Attends to another person demonstrating a procedure.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Anticipates the beginning of a literacy activity.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
3	Responds to own name presented via any communicative modality.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
4	Attends to literacy materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
5	Follows directions that contain verbs (point to/look at/pick up).	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
6	Responds to yes/no questions about information in print and nonprint materials.	Standard 5: Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
7	Previews/explores resource materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Identifies appropriate resource to gain specific information.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Selects literacy materials/books by character.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Displays knowledge of front/back, right side up, page turning, and scanning when exploring literacy material.	Standard 2: Students apply a range of skills and strategies to read.
11	Attends to pictures/symbols/objects when presented.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Uses auditory, visual, or tactile scanning to maintain place and follow along.	Standard 2: Students apply a range of skills and strategies to read.
13	Rereads (requests or goes back a page, hit switch to rewind, etc.) to gain understanding.	Standard 2: Students apply a range of skills and strategies to read.
14	Requests assistance in understanding unfamiliar words/pictures/symbols/objects.	Standard 2: Students apply a range of skills and strategies to read.
15	Identifies a word/picture/symbol/object that is new and unfamiliar.	Standard 2: Students apply a range of skills and strategies to read.
16	Attends to literacy materials from beginning to end.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
17	Answers "who" questions about a character in the story (using spoken words, pictures/symbols/objects or communication devices).	Standard 2: Students apply a range of skills and strategies to read.
18	Answers "what" questions about an event or object in story.	Standard 2: Students apply a range of skills and strategies to read.

19	Answers "where" questions about the place in story.	Standard 2: Students apply a range of skills and strategies to read.
20	Identifies supporting details from an expository reading/literary selection.	Standard 2: Students apply a range of skills and strategies to read.
21	Uses unfamiliar words/pictures/symbols/objects to communicate an unfamiliar message.	Standard 2: Students apply a range of skills and strategies to read.
22	Uses various print and nonprint sources to produce graphic representation or complete a task.	Standard 4: Students select, read, and respond to print and nonprint material for a variety of purposes.
23	Communicates to others the main idea of literacy materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.

Mathematics - Grade 5		
Item	**Performance Indicator**	**Standard**
1	Attend to teacher placing numbers in order from least/smallest to greatest/largest.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
2	Position numbers on a number line.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
3	Identify first and last.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
4	Indicate ordinal position.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
5	Arrange a set of objects, up to ten, from least to most. Carry out a strategy to solve a number problem.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
6	Attend to another person combining objects to add.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
7	Demonstrate an understanding of the concepts of some/more/ less/take away/all gone/ no more.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
8	Connect plus and minus symbols to operations.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
9	Demonstrate an understanding that adding 0 to any number equals the same number. Carry out a strategy to solve a number problem.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
10	Model a written addition problem using sets of objects, combining the sets, and counting the objects, either counting all or counting on.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
11	Attend to another person showing the relationship between two variables using objects, pictures, symbols, or numbers.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
12	Recognize a cause-effect relationship between two elements.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.

13	Choose correct strategies or procedures to solve an algebraic problem in algebra.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
14	Demonstrate/ communicate what the relationship is between two elements.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
15	Use methods and tools to solve a measurement problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
16	Attend to another person reading temperature.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
17	Select the appropriate tool to be used in making a measure.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
18	Read temperatures from a thermometer to the accuracy of the labeled numbers.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
19	Carry out a strategy to solve a measurement problem.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
20	Attend to real world problems that require measurement.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.

21	Attend to another person measuring capacity.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
22	Select the appropriate tool to be used in making a measure.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
23	Use methods and tools to solve a measurement problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
24	Use nonstandard tools and units to determine the capacity of a container.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
25	Use standard tools and standard units of capacity to measure the capacity of a container.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.

Reading - Grade 5		
Item	**Performance Indicator**	**Standard**
1	Attend to literacy materials from beginning to end.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Use a resource to solve a problem or gain needed information.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
3	Use a resource to solve a problem or gain needed information.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
4	Accurately order steps from a functional text.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
5	Demonstrate understanding of the difference between an information resource and literature.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
6	Attend to person and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
7	Make an appropriate prediction.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Compare and contrast the impact of setting.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Identify environmental print in context.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Follow directions that contain a preposition.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
11	Attend to person and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Recall the name of a common object when given the function of the object.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
13	Select important details from reading materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Identify a resource to gain information.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
15	Identify the main message of an expository reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
16	Attend to a literacy activity in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.

17	Identify components related to the beginning of a reading selection.	Standard 2: Students apply a range of skills and strategies to read.
18	Answer “where” questions about the story.	Standard 2: Students apply a range of skills and strategies to read.
19	Sequence events in simple stories.	Standard 2: Students apply a range of skills and strategies to read.
20	Draw conclusions based on facts in the story.	Standard 2: Students apply a range of skills and strategies to read.
21	Attend to person and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
22	Match pictures to printed words.	Standard 2: Students apply a range of skills and strategies to read.
23	Recognize consonant sounds.	Standard 2: Students apply a range of skills and strategies to read.
24	Use simple letter-sound association to decode unfamiliar words.	Standard 2: Students apply a range of skills and strategies to read.
25	Identify syllables.	Standard 2: Students apply a range of skills and strategies to read.

Mathematics - Grade 6		
Item	**Performance Indicator**	**Standard**
1	Attend as another person demonstrates an understanding that written numerals represent number (quantities).	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
2	Match a numeral to a quantity of a set of objects.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
3	Produce a numeral to 10.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
4	Use methods and tools to solve a number problem, including modeling with objects.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
5	Carry out a strategy to solve a number problem.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
6	Attend to another person removing objects or comparing sets to subtract.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
7	Employ strategies to recall simple subtraction facts for single-digit differences from 10 (e.g., counting back; comparison/addition— add to the smaller number to get the larger one).	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
8	Demonstrate understanding that subtracting 0 from any number equals the number.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
9	Use a calculator for whole-number computation.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
10	Use methods and tools to solve a number problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
11	Attend to another person demonstrating congruence.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
12	Recall shapes and their relative positions after they have been viewed for only a brief period of time.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.

13	Demonstrate transformations of shapes, e.g., sliding.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
14	Cover a figure with shapes.	Standard 4: Students demonstrate understanding of shape and ability to use geometry.
15	Use methods and tools to solve a geometric problem, including modeling with objects.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 4: Students demonstrate understanding of shape and ability to use geometry.
16	Attend to another person telling time.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
17	Tell time to the hour using an analog clock.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
18	Use methods and tools to solve a measurement problem.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
19	Read time using a digital clock.	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
20	Read time using a digital clock (e.g., “It is two twenty-five.”).	Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.
21	Attend to another person modeling mathematical relationships (e.g., modeling different numbers).	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
22	Model sets that contain nothing or one or more items (some, none).	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
23	Demonstrate that objects defined by a shared attribute form a set to which a number can be applied. (For example, make a set of red triangles. How many are there?)	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
24	Model sets of the same/different amounts and compare them.	Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.
25	Use methods and tools to solve a problem involving patterns, relations, or functions, including modeling with objects.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 7: Students demonstrate understanding of and an ability to use patterns, relations and functions.

Reading - Grade 6		
Item	**Performance Indicator**	**Standard**
1	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Display knowledge of front and back, right-side up, page turning, and scanning when exploring literacy materials.	Standard 2: Students apply a range of skills and strategies to read.
3	Use listening/observing strategies to comprehend a reading selection.	Standard 2: Students apply a range of skills and strategies to read.
4	Based on the context of a reading selection, identify appropriate definition of multiple-meaning words.	Standard 2: Students apply a range of skills and strategies to read.
5	Use word recognition skills and context clues to comprehend text.	Standard 2: Students apply a range of skills and strategies to read.
6	Attend to person and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
7	Identify the main idea in a selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Identify details related to the main idea.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Select important details/facts from reading materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Creates an illustration/photo essay/ object box/ specific to the text.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
11	Attend to person and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Identify the main message of an expository reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
13	Retell key events in sequence.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Identify common object/symbol when given the function of the object or symbol.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
15	Select important details/facts from reading materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
16	Attend to person and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.

17	Answer “who” questions about characters in stories.	Standard 2: Students apply a range of skills and strategies to read.
18	Answer “what” questions about objects in stories.	Standard 2: Students apply a range of skills and strategies to read.
19	Answer “why” questions about issues in a reading selection.	Standard 2: Students apply a range of skills and strategies to read.
20	Identify cultural elements in a reading selection.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
21	Attends to literacy materials from beginning to end.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
22	Identify details of characters that are the same.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
23	Compare/contrast information in reading materials.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
24	On an organizer, make a graphic representation of similarities and differences from a topic in the text.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
25	Make connections between reading materials and personal experiences.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.

Mathematics - Grade 7		
Item	**Performance Indicator**	**Standard**
1	Attend as another person demonstrates an understanding of the concept of some and none.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
2	Associate the number 0 with empty sets in different settings.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
3	Use a quantitative label when making a guess (e.g., a few, many, and seventeen).	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
4	Determine which of two numbers is closer to the quantity in a given set.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
5	Identify a reasonable quantity when guessing the amount in a given set.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
6	coins by attributes (metal color, size, weight, texture).	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
7	Match coins to like coins and bills to like bills.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
8	Match coins and their values.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
9	Count out an exact amount of money.	Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.
10	Round numbers to the nearest 10 (e.g., 27 rounds to 30) or nearest 100.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.

11	Attend to another person setting up a number sentence with a box as a placeholder.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
12	Recognize that a box is used as a placeholder in a number sentence.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
13	Find a simple missing addend represented by a box in a number sentence.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
14	Choose correct strategies or procedures to solve an algebraic problem in algebra.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
15	Use methods and tools to solve a problem, including drawing pictures, modeling with objects, estimating, using paper and pencil, and using a calculator.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
16	Attend to another person showing relationships between two variables using objects.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
17	Recognize a cause-effect relationship between two elements.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
18	Choose correct strategies or procedures to solve an algebraic problem.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
19	Use methods and tools to solve a problem, including modeling with objects.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
20	Demonstrate/ communicate what the relationship is between two elements.	Standard 3: Students use algebraic concepts, process, and language to model and solve a variety of real-world and mathematical problems.
21	Attend to another person collecting data.	Standard 6: The students demonstrate understanding of an ability to use data analysis, probability, and statistics.
22	Given a class of objects, sort into categories.	Standard 6: The students demonstrate understanding of an ability to use data analysis, probability, and statistics.

23	Display data using concrete objects.	Standard 6: The students demonstrate understanding of an ability to use data analysis, probability, and statistics.
24	Determine which category has the most/ least.	Standard 6: The students demonstrate understanding of an ability to use data analysis, probability, and statistics.
25	Make decisions based on data, a table, or a graph.	Standard 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology. Standard 6: The students demonstrate understanding of an ability to use data analysis, probability, and statistics.

Reading - Grade 7		
Item	**Performance Indicator**	**Standard**
1	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Based on the context of a reading selection, identify appropriate definition of multiple-meaning words.	Standard 2: Students apply a range of skills and strategies to read.
3	Identify antonyms.	Standard 2: Students apply a range of skills and strategies to read.
4	Explain the meaning of vocabulary words in the context of a reading selection.	Standard 2: Students apply a range of skills and strategies to read.
5	Identify cultural elements in a reading selection.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
6	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
7	Identify the main message of an expository reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Retell key events in sequence.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Identify common object/symbol when given the function of the object or symbol.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Select important details/facts from reading materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
11	Attend to literacy materials from beginning to end.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Identify details related to the main idea.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
13	Identify the main idea of a reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Identify details related to the main idea.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
15	Identify common object/symbol when given the function of the object or symbol.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
16	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
17	Locate title.	Standard 2: Students apply a range of skills and strategies to read.

18	Use chapter headings to locate information.	Standard 2: Students apply a range of skills and strategies to read.
19	Use text features to move through text in appropriate sequence.	Standard 2: Students apply a range of skills and strategies to read.
20	Answer questions about the main idea of the text.	Standard 2: Students apply a range of skills and strategies to read.
21	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
22	Attend to people and literacy materials in a purposeful manner.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
23	Defend an author's point of view.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
24	Identify facts in text.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
25	Identify non-truths within a text.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.

Mathematics - Grade 8		
Item	**Performance Indicator**	**Standard**
1	Attends to another person demonstrating a procedure.	Standard 1: Problem Solving
2	Anticipates the beginning of a math activity.	Standard 1: Problem Solving
3	Attends to materials being displayed.	Standard 1: Problem Solving
4	Attends to another person showing relationships between two variables, using objects, picture, symbols, or numbers.	Standard 1: Problem Solving
5	Demonstrates the concept of "one."	Standard 2: Numbers and Operations
6	Determines questions for obtaining data.	Standard 6: Data Analysis, Probability, and Statistics
7	Describes features of the data.	Standard 6: Data Analysis, Probability, and Statistics
8	Counts with another person.	Standard 2: Numbers and Operations
9	Creates a frequency table.	Standard 6: Data Analysis, Probability, and Statistics
10	Sets up a graph; labels axes.	Standard 6: Data Analysis, Probability, and Statistics
11	Creates a simple graph/frequency plot using real objects and/or symbols.	Standard 6: Data Analysis, Probability, and Statistics
12	Displays two or more categories on a bar graph.	Standard 6: Data Analysis, Probability, and Statistics
13	Explains how to use a bar graph.	Standard 6: Data Analysis, Probability, and Statistics
13	Explains how to use a bar graph.	Standard 1: Problem Solving
14	Determines which category has the most/least votes.	Standard 6: Data Analysis, Probability, and Statistics
15	Uses tables or graphs to make decisions.	Standard 6: Data Analysis, Probability, and Statistics
15	Uses tables or graphs to make decisions.	Standard 1: Problem Solving
16	Shows a quantity.	Standard 2: Numbers and Operations
17	Demonstrates understanding of some/more/less.	Standard 2: Numbers and Operations
18	Computes an addition problem.	Standard 2: Numbers and Operations
19	Shows a relationship between two variables.	Standard 3: Algebra
20	Given a numerical relationship between two variables and the value of one variable, finds the other.	Standard 3: Algebra
21	Given a numerical relationship between two variables and the value of one variable, finds the other.	Standard 3: Algebra
22	Uses a table to make decisions.	Standard 6: Data Analysis, Probability, and Statistics
22	Uses a table to make decisions.	Standard 1: Problem Solving
23	Attends to another person measuring length.	Standard 5: Measurement
24	Measures with a ruler.	Standard 5: Measurement
25	Uses an appropriate unit of measure.	Standard 5: Measurement
26	Demonstrates reasoning to solve a measurement problem.	Standard 5: Measurement
26	Demonstrates reasoning to solve a measurement problem.	Standard 1: Problem Solving
27	Measures with a ruler.	Standard 5: Measurement
28	Uses a calculator for computation.	Standard 2: Numbers and Operations
29	Chooses a correct procedure to solve a problem.	Standard 2: Numbers and Operations
29	Chooses a correct procedure to solve a problem.	Standard 1: Problem Solving
30	Uses strategy to compute an addition problem.	Standard 2: Numbers and Operations
30	Uses strategy to compute an addition problem.	Standard 1: Problem Solving
31	Subdivides a geometric shape.	Standard 4: Geometry
32	Produces fractional parts of a whole.	Standard 2: Numbers and Operations

Item correlates with 2 standards

Reading - Grade 7		
Item	**Performance Indicator**	**Standard**
1	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Based on the context of a reading selection, identify appropriate definition of multiple-meaning words.	Standard 2: Students apply a range of skills and strategies to read.
3	Identify antonyms.	Standard 2: Students apply a range of skills and strategies to read.
4	Explain the meaning of vocabulary words in the context of a reading selection.	Standard 2: Students apply a range of skills and strategies to read.
5	Identify cultural elements in a reading selection.	Standard 4: Students select, read, and respond to print and nonprint materials for a variety of purposes.
6	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
7	Identify the main message of an expository reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Retell key events in sequence.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Identify common object/symbol when given the function of the object or symbol.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Select important details/facts from reading materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
11	Attend to literacy materials from beginning to end.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Identify details related to the main idea.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
13	Identify the main idea of a reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Identify details related to the main idea.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
15	Identify common object/symbol when given the function of the object or symbol.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
16	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
17	Locate title.	Standard 2: Students apply a range of skills and strategies to read.

18	Use chapter headings to locate information.	Standard 2: Students apply a range of skills and strategies to read.
19	Use text features to move through text in appropriate sequence.	Standard 2: Students apply a range of skills and strategies to read.
20	Answer questions about the main idea of the text.	Standard 2: Students apply a range of skills and strategies to read.
21	Attend to people and literacy materials in a purposeful manner.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
22	Attend to people and literacy materials in a purposeful manner.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
23	Defend an author's point of view.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
24	Identify facts in text.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
25	Identify non-truths within a text.	Standard 5:Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.

Mathematics - Grade 8		
Item	**Performance Indicator**	**Standard**
1	Attends to another person demonstrating a procedure.	Standard 1: Problem Solving
2	Anticipates the beginning of a math activity.	Standard 1: Problem Solving
3	Attends to materials being displayed.	Standard 1: Problem Solving
4	Attends to another person showing relationships between two variables, using objects, picture, symbols, or numbers.	Standard 1: Problem Solving
5	Demonstrates the concept of "one."	Standard 2: Numbers and Operations
6	Determines questions for obtaining data.	Standard 6: Data Analysis, Probability, and Statistics
7	Describes features of the data.	Standard 6: Data Analysis, Probability, and Statistics
8	Counts with another person.	Standard 2: Numbers and Operations
9	Creates a frequency table.	Standard 6: Data Analysis, Probability, and Statistics
10	Sets up a graph; labels axes.	Standard 6: Data Analysis, Probability, and Statistics
11	Creates a simple graph/frequency plot using real objects and/or symbols.	Standard 6: Data Analysis, Probability, and Statistics
12	Displays two or more categories on a bar graph.	Standard 6: Data Analysis, Probability, and Statistics
13	Explains how to use a bar graph.	Standard 6: Data Analysis, Probability, and Statistics
13	Explains how to use a bar graph.	Standard 1: Problem Solving
14	Determines which category has the most/least votes.	Standard 6: Data Analysis, Probability, and Statistics
15	Uses tables or graphs to make decisions.	Standard 6: Data Analysis, Probability, and Statistics
15	Uses tables or graphs to make decisions.	Standard 1: Problem Solving
16	Shows a quantity.	Standard 2: Numbers and Operations
17	Demonstrates understanding of some/more/less.	Standard 2: Numbers and Operations
18	Computes an addition problem.	Standard 2: Numbers and Operations
19	Shows a relationship between two variables.	Standard 3: Algebra
20	Given a numerical relationship between two variables and the value of one variable, finds the other.	Standard 3: Algebra
21	Given a numerical relationship between two variables and the value of one variable, finds the other.	Standard 3: Algebra
22	Uses a table to make decisions.	Standard 6: Data Analysis, Probability, and Statistics
22	Uses a table to make decisions.	Standard 1: Problem Solving
23	Attends to another person measuring length.	Standard 5: Measurement
24	Measures with a ruler.	Standard 5: Measurement
25	Uses an appropriate unit of measure.	Standard 5: Measurement
26	Demonstrates reasoning to solve a measurement problem.	Standard 5: Measurement
26	Demonstrates reasoning to solve a measurement problem.	Standard 1: Problem Solving
27	Measures with a ruler.	Standard 5: Measurement
28	Uses a calculator for computation.	Standard 2: Numbers and Operations
29	Chooses a correct procedure to solve a problem.	Standard 2: Numbers and Operations
29	Chooses a correct procedure to solve a problem.	Standard 1: Problem Solving
30	Uses strategy to compute an addition problem.	Standard 2: Numbers and Operations
30	Uses strategy to compute an addition problem.	Standard 1: Problem Solving
31	Subdivides a geometric shape.	Standard 4: Geometry
32	Produces fractional parts of a whole.	Standard 2: Numbers and Operations

Item correlates with 2 standards

Reading - Grade 8		
Item	**Performance Indicator**	**Standard**
1	Anticipates the beginning of a literacy activity.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Responds to own name presented via any communicative modality.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
3	Anticipates routines or patterns connected to literacy activity.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
4	Identifies a word/picture/symbol/object used to name a familiar place.	Standard 2: Students apply a range of skills and strategies to read.
5	Locates the library.	Standard 4: Students select, read, and respond to print and nonprint material for a variety of purposes.
6	Identifies a word/pictures/symbols/objects used to name familiar people.	Standard 2: Students apply a range of skills and strategies to read.
7	Attends to literacy materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Indicates preference when offered a choice of books/materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
9	Indicates adaptations needed to understand text.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Explores a variety of literacy materials.	Standard 2: Students apply a range of skills and strategies to read.
11	Identifies resource materials to gain information about words.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Identifies a variety of resources.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
13	Selects literacy materials/books by character or topic.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Identifies words/pictures/symbols/objects to name familiar people.	Standard 2: Students apply a range of skills and strategies to read.
15	Identifies a word/picture/symbol/object used for content communication.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
16	Identifies the appropriate resource to gain specific information.	Standard 4: Students select, read, and respond to print and nonprint material for a variety of purposes.
17	Uses text features to move through text in the appropriate sequence.	Standard 2: Students apply a range of skills and strategies to read.
18	Recognizes beginning consonant letter-sound association.	Standard 2: Students apply a range of skills and strategies to read.
19	Recognizes vowel letter-sound association.	Standard 2: Students apply a range of skills and strategies to read.
20	Indicates that a sentence is made up of words.	Standard 2: Students apply a range of skills and strategies to read.
21	Uses auditory or visual scanning to maintain place.	Standard 2: Students apply a range of skills and strategies to read.

22	Displays a knowledge of front/back, right side up, page turning, and scanning when exploring literacy materials.	Standard 2: Students apply a range of skills and strategies to read.
23	Rereads (goes back a page, hits switch to rewind tape, etc.) to gain understanding.	Standard 2: Students apply a range of skills and strategies to read.
24	Recalls name of common object/symbol when given the function of the object.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
25	Identifies the main idea of an expository reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.

Mathematics - Grade 10		
Item	**Performance Indicator**	**Standard**
1	Anticipates the beginning of a math activity.	Standard 1: Problem Solving
2	Attends to materials being displayed.	Standard 1: Problem Solving
3	Attends to another person showing relationships between two variables using objects, pictures, symbols, or numbers.	Standard 1: Problem Solving
4	Attends to another person demonstrating with concrete materials.	Standard 1: Problem Solving
5	Demonstrates that a collection of objects has a quantity.	Standard 2: Numbers and Operations
6	Demonstrates the concept of one.	Standard 2: Numbers and Operations
7	Matches bills and their values.	Standard 2: Numbers and Operations
8	Matches bills and values.	Standard 2: Numbers and Operations
9	Uses different bill combinations to show equivalent amounts.	Standard 2: Numbers and Operations
10	Uses different bill combinations to show equivalent amounts.	Standard 2: Numbers and Operations
11	Demonstrates that coins and bills have value and can be exchanged for merchandise/goods/services.	Standard 2: Numbers and Operations
12	Chooses addition.	Standard 2: Numbers and Operations
13	Computes addition and subtraction problems with money.	Standard 2: Numbers and Operations
14	Attends to another person showing relationships between two variables.	Standard 3: Algebra
15	Given a numerical relationship between two variables and the value of one of the variables, finds the other variable.	Standard 3: Algebra
16	Given a numerical relationship between two variables and the value of one of the variables, finds the value of the other variable.	Standard 3: Algebra
17	Uses or extends a T-table to find value of a variable.	Standard 3: Algebra
18	Uses or extends a T-table to find value of a variable.	Standard 3: Algebra
19	Uses or extends a T-table to find value of a variable.	Standard 3: Algebra
20	Determines change.	Standard 2: Numbers and Operations
21	Determines how much more money is needed.	Standard 2: Numbers and Operations
22	Attends to another person demonstrating with concrete materials.	Standard 7: Patterns, Relations, and Functions
23	Models mathematical problems.	Standard 7: Patterns, Relations, and Functions
24	Computes an addition problem with money.	Standard 2: Numbers and Operations
25	Computes addition problems.	Standard 2: Numbers and Operations
26	Shows relationship between two variables.	Standard 7: Patterns, Relations, and Functions
27	Given a mathematical relationship between two variables and the value of one variable, finds the values of the other variable.	Standard 3: Algebra
28	Uses or extends a T-table to find value of a values.	Standard 3: Algebra
29	Uses tables to make decisions.	Standard 7: Patterns, Relations, and Functions
30	Explains decisions based on information in the tables.	Standard 3: Algebra
30	Explains decisions based on information in the tables.	Standard 1: Problem Solving
31	Uses tables to make decisions.	Standard 7: Patterns, Relations, and Functions
32	Explains decisions based on tables.	Standard 3: Algebra
32	Explains decisions based on tables.	Standard 1: Problem Solving

Item correlates with 2 Standards

Reading - Grade 10		
Item	**Performance Indicator**	**Standard**
1	Attends to another person demonstrating a procedure.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
2	Anticipates the beginning of a literacy activity.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
3	Responds to own name presented via any communicative modality.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
4	Attends to literacy materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
5	Previews/explores reading materials.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
6	Locates picture/object/symbol when named or signed.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
7	Identifies a variety of resources.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
8	Demonstrates understanding of difference between information resource and literature.	Standard 4: Students select, read., and respond to print and nonprint material for a variety of purposes.
9	Demonstrates an understanding/awareness of prior knowledge of concept.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
10	Identifies appropriate information resource to gain specific information.	Standard 4: Students select, read., and respond to print and nonprint material for a variety of purposes.
11	Indicates adaptations needed to understand text.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
12	Identifies words/pictures/symbols/objects that are new and unfamiliar.	Standard 2: Students apply a range of skills and strategies to read.
13	Selects literacy materials/books by character or topic.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
14	Indicates preference when offered a choice of books.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
15	Identifies word/picture/symbol/object used for content communication.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
16	Uses text features to move through text in appropriate sequence.	Standard 2: Students apply a range of skills and strategies to read.
17	Follows directions that contain prepositions.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
18	Uses auditory or visual scanning to maintain place.	Standard 2: Students apply a range of skills and strategies to read.
19	Displays knowledge of front/back, right side up, page turning, scanning, when exploring literacy material.	Standard 2: Students apply a range of skills and strategies to read.

20	Rereads to gain understanding (goes back a page, hits switch to rewind tape, etc.).	Standard 2: Students apply a range of skills and strategies to read.
21	Identifies the main idea of expository reading selection.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.
22	Identifies words, pictures, symbols, objects used to name familiar people.	Standard 2: Students apply a range of skills and strategies to read.
23	Combines information from two or more sources.	Standard 5: Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.
24	Uses a picture/object to identify activity or item.	Standard 2: Students apply a range of skills and strategies to read.
25	Uses pictures/symbols/objects to communicate abstract meaning.	Standard 2: Students apply a range of skills and strategies to read.
26	Communicates an opinion.	Standard 1: Students construct meaning as they comprehend, interpret, and respond to what they read.

APPENDIX F
REPORT SHELLS

STUDENT SUMMARY
CLASS ROSTER AND ITEM LEVEL REPORT
SCHOOL SYSTEM REPORT

CRT-Alternate Performance Level Descriptors

The Performance Level Descriptors below describe students' knowledge, skills, and abilities in a content area. These descriptions provide a picture or profile of student achievement at the four performance levels: **Advanced**, **Proficient**, **Nearing Proficiency**, and **Novice**. Content specific performance level descriptors may be found on OPI's web site at http://www.opi.mt.gov/assessment/index.html

Advanced
The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content specific performance indicators.

Proficient
The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators.

Nearing Proficiency
The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content specific performance indicators.

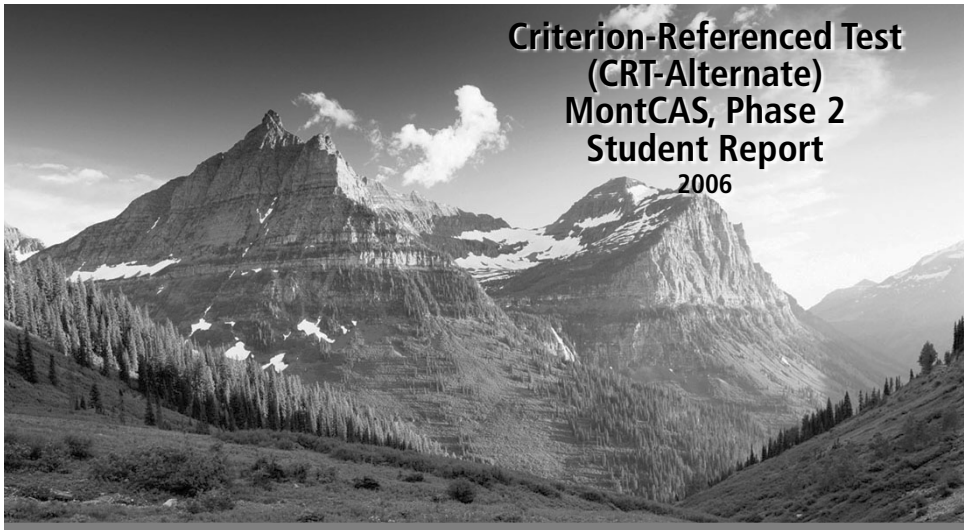
Novice
The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators.

	Score Ranges	
	Reading	**Math**
Advanced	268-300	278-300
Proficient	250-267	250-277
Nearing Proficiency	225-249	225-249
Novice	200-224	200-224

For more information regarding student assessments in Montana, check out the Office of Public Instruction's Parents Page at http://www.opi.mt.us/parents/.

OPI Contact
Judy Snow, State Assessment Director
406-444-3656
jsnow@mt.gov

Linda McCulloch, Superintendent
Montana Office of Public Instruction
PO Box 202501
Helena, Montana 59620-2501
http://www.opi.mt.gov



Criterion-Referenced Test (CRT-Alternate) MontCAS, Phase 2 Student Report

2006

Student Name: Amanda Smith
School: Sunnydale Elementary
System: Helena
Grade: 4

Dear Parents/Guardians:

This report contains the results of the third year of the Montana Comprehensive Assessment System Criterion-Referenced Test-Alternate (CRT-Alternate) that your child took in February and March. The major purpose of the CRT-Alternate is to provide schools with solid information to evaluate and improve curriculum and instruction to help all students meet Montana's reading and mathematics standards. This report provides important information about your child's performance on the assessment, along with state results.

Your child participated in the CRT-Alternate Assessment. The CRT-Alternate measures your child's performance based on alternate achievement standards. The CRT-Alternate is aligned with the Montana State Standards for Reading and Mathematics. Test results are based on teacher observation of your child's performance on specifically designed tasks. Your child's results in reading and mathematics are reported in one of four performance levels. The performance levels are defined on the back cover of this report.

It is important to remember that the CRT-Alternate is just one measure of your child's academic progress. Your local school staff can provide further information about your child's performance in school. The CRT-Alternate, which is required by the No Child Left Behind Act, is part of an ongoing statewide educational improvement process. Working together, we can ensure that Montana's children continue to receive a high-quality education.

Sincerely,

Linda McCulloch
Montana Superintendent of Public Instruction

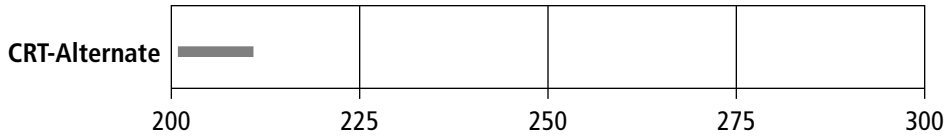
Scaled Scores on the CRT-Alternate

The criterion-referenced test-alternate (CRT-Alternate) is designed to measure student performance against the learning goals described in the Montana Content Standards (http://www.opi.state.mt.us/standards/index.html). Consistent with this purpose, results on the CRT-Alternate are reported according to performance levels that describe student performance in relation to the established state standards. There are four performance levels: **Advanced**, **Proficient**, **Nearing Proficiency**, and **Novice**. Your child's performance levels in reading and mathematics are based on a total scaled score in each content area. Scaled scores in each content area range from 200 to 300. Your child's performance levels, based on the scaled scores, are shown in the bar graphs below.

Scaled Scores

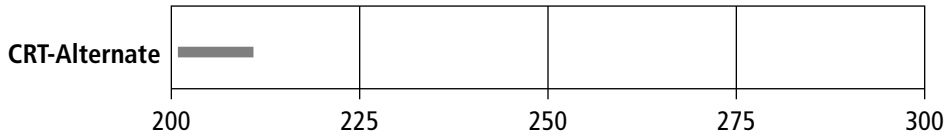
STUDENT RESULTS FOR READING

Performance Level: Novice
Student Scaled Score: 217



STUDENT RESULTS FOR MATHEMATICS

Performance Level: Novice
Student Scaled Score: 217



Scores on Montana Content Standards

In addition to performance levels, CRT-Alternate results are reported for Montana Content Standards in reading and mathematics. Unlike scaled scores which provide a total performance level score, Montana Content Standard Scores provide more specific information about your child's achievement on the CRT-Alternate. The chart on the following page shows your child's performance in each area of study within subject areas (Montana Content Standards for reading and math). These results can be used to show your child's relative strengths or weaknesses.

Contact your student's school for more information about the following symbols:
† Student did not complete the assessment.
§ Teacher halted the administration of the assessment after the student scored a 0 for three consecutive items on two different test administrations.

Scores on Montana Standards

	Points Possible	Student Percentage	State Percentage	Percentage of Points Earned (0 25 50 75 100)
Reading Standards				
1. Students construct meaning as they comprehend, interpret, and respond to what they read.	25	75%	10%	
2. Students apply a range of skills and strategies to read.	25	75%	10%	
3. Students set goals, monitor, and evaluate their reading progress.	This standard is not measurable in a statewide assessment.			
4. Students select, read, and respond to print and nonprint material for a variety of purposes.	25	75%	10%	
5. Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences.	25	75%	10%	
Math Standards				
1. Problem Solving	25	75%	10%	
2. Numbers and Operations	25	75%	10%	
3. Algebra	25	75%	10%	
4. Geometry	25	75%	10%	
5. Measurement	25	75%	10%	
6. Data Analysis, Statistics, and Probability	25	75%	10%	
7. Patterns, Relations, and Functions	25	75%	10%	

Student percentage of points earned

State percentage of points earned

CRT-Alternate Performance Level Descriptors

The Performance Level Descriptors below describe students' knowledge, skills, and abilities in a content area. These descriptions provide a picture or profile of student achievement at the four performance levels: **Advanced**, **Proficient**, **Nearing Proficiency**, and **Novice**. Content specific performance level descriptors may be found on OPI's web site at http://www.opi.mt.gov/assessment/index.html

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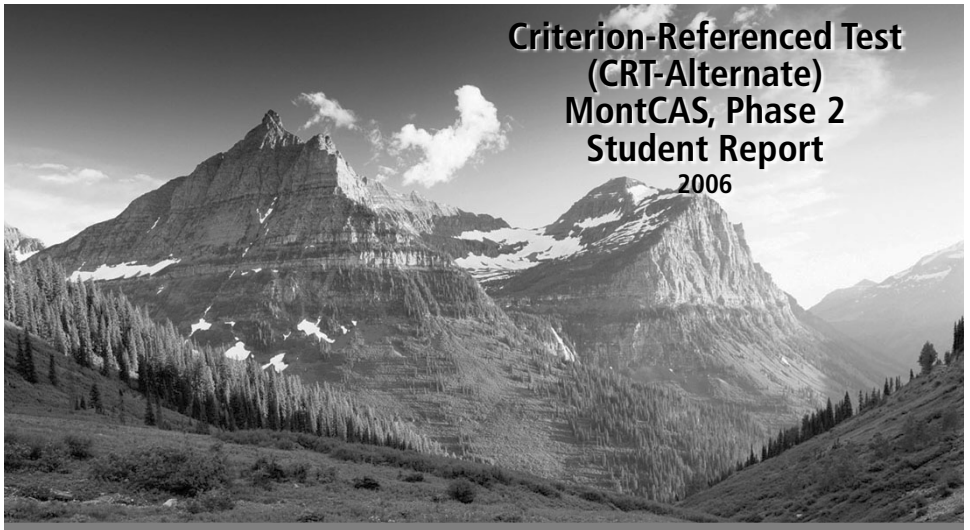

Criterion-Referenced Test (CRT-Alternate) MontCAS, Phase 2 Student Report

2006

Student Name: Amanda Smith
School: Sunnydale Elementary
System: Helena
Grade: 4

Dear Parents/Guardians:

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Scaled Scores

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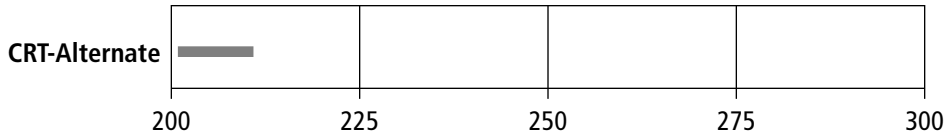
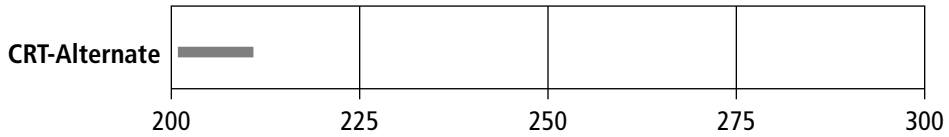


STUDENT RESULTS FOR MATHEMATICS

Performance Level: Novice
Student Scaled Score: 217



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1. Problem Solving	25	75%	10%	
2. Numbers and Operations	25	75%	10%	
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4. Geometry	25	75%	10%	
5. Measurement	25	75%	10%	
6. Data Analysis, Statistics, and Probability	25	75%	10%	
7. Patterns, Relations, and Functions	25	75%	10%	

Student percentage of points earned

State percentage of points earned

MontCAS, Phase 2
CRT-Alternate

School: Abcdefghijklm Nopqrst Uvwxyz
System: Abcdefghijklm Nopqrst Uvwxyz
Grade: 04
Spring 2006

Reading

School Summary Report

I. Distribution of Scores

Perf. Level	Scores	School			System			State		
		N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.
Advanced	123-123	XX	XX		XX	XX		XX	XX	
	123-123	XX	XX		XX	XX		XX	XX	
	123-123			XX			XX			XX
	123-123									
	123-123									
	123-123									
Proficient	123-123									
	123-123									
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									
Nearing Proficiency	123-123									
	123-123									
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									
Novice	123-123									
	123-123									
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									

*The sum of the points for each standard may exceed the total points, as some items correlate with more than one standard.

II. Subtest Results

Reading		Possible Points	Average Points Earned		
			School	System	State
Total Points*		000	000	000	000
Standards	1. Students construct meaning as they comprehend, interpret, and respond to what they read				
	2. Students apply a range of skills and strategies to read				
	3. Students set goals, monitor, and evaluate their reading progress	This standard is not measurable in a statewide assessment.			
	4. Students select, read, and respond to print and nonprint material for a variety of purposes				
	5. Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences				

-- There were too few score points to report on this standard, or no items on the test measured this standard.

CRT-Alternate Performance Level Descriptors

Advanced (score to be determined)
The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content specific performance indicators.

Proficient (score to be determined)
The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators.

Nearing Proficiency (score to be determined)
The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content specific performance indicators.

Novice (score to be determined)
The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators.

MontCAS, Phase 2 CRT-Alternate

Confidential

Reading

School Summary Report

School: Abcdefghijklm Nopqrst Uvwxyz
System: Abcdefghijklm Nopqrst Uvwxyz
Grade: 04
Spring 2006

III. Results for Subgroups of Students

Reporting Category	School					System					State				
	Number	% in N	% in NP	% in P	% in A	Number	% in N	% in NP	% in P	% in A	Number	% in N	% in NP	% in P	% in A
All Students	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Gender	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Male															
Female															
Ethnicity															
American Indian or Alaska Native															
Asian															
Hispanic															
Black or African American															
Native Hawaiian or Other Pacific Islander															
White															
Significant Cognitive Disability															
Special Education															
Students with a 504 Plan															
Title I (optional)															
Tested with Standard Accommodation															
Tested with Non-Standard Accommodation															
Alternate Assessment															
Migrant															
Gifted/Talented															
LEP/ELL															
Former LEP Student															
LEP Student Enrolled for First Time in a U.S. School		**Performance levels are not reported for 1st year LEP students**													
Free/Reduced Lunch															
Special Education Disability(ies):															
Autism															
Cognitive Delay															
Deaf-Blindness Impairment															
Deafness															
Emotional Disturbance															
Hearing Impairment															
Learning Disability															
Other Health Impairment															
Orthopedic Impairment															
Speech/Language															
Traumatic Brain Injury															
Visual Impairment															

*Less than ten (10) students were assessed

MontCAS, Phase 2
CRT-Alternate

School: Abcdefghijklm Nopqrst Uvwxyz
System: Abcdefghijklm Nopqrst Uvwxyz
Grade: 04
Spring 2006

Mathematics

School Summary Report

I. Distribution of Scores

Perf. Level	Scores	School			System			State		
		N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat
Advanced	123-123	XX	XX		XX	XX		XX	XX	
	123-123	XX	XX		XX	XX		XX	XX	
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									
Proficient	123-123									
	123-123									
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									
Nearing Proficiency	123-123									
	123-123									
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									
Novice	123-123									
	123-123									
	123-123									
	123-123			XX			XX			XX
	123-123									
	123-123									

*The sum of the points for each standard may exceed the total points, as some items correlate with more than one standard.

II. Subtest Results

Mathematics		Possible Points	Average Points Earned		
			School	System	State
Total Points*		000	000	000	000
Standards	1. Problem Solving				
	2. Numbers and Operations				
	3. Algebra				
	4. Geometry				
	5. Measurement				
	6. Data Analysis, Statistics, and Probability				
	7. Patterns, Relations, and Functions				

-- There were too few score points to report on this standard, or no items on the test measured this standard.

CRT-Alternate Performance Level Descriptors

Advanced (score to be determined)
The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content specific performance indicators.

Proficient (score to be determined)
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Nearing Proficiency (score to be determined)
The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content specific performance indicators.

Novice (score to be determined)
The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators.

MontCAS, Phase 2 CRT-Alternate

Confidential

Reading

System Summary Report

System: Abcdefghijklm Nopqrst Uvwxyz
Grade: 04
Spring 2006

III. Results for Subgroups of Students

Reporting Category	System					State				
	Number	% in N	% in NP	% in P	% in A	Number	% in N	% in NP	% in P	% in A
All Students	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Gender	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Male										
Female										
Ethnicity										
American Indian or Alaska Native										
Asian										
Hispanic										
Black or African American										
Native Hawaiian or Other Pacific Islander										
White										
Significant Cognitive Disability										
Special Education										
Students with a 504 Plan										
Title I (optional)										
Tested with Standard Accommodation										
Tested with Non-Standard Accommodation										
Alternate Assessment										
Migrant										
Gifted/Talented										
LEP/ELL										
Former LEP Student										
LEP Student Enrolled for First Time in a U.S. School		**Performance levels are not reported for 1st year LEP students**								
Free/Reduced Lunch										
Special Education Disability(ies):										
Autism										
Cognitive Delay										
Deaf-Blindness Impairment										
Deafness										
Emotional Disturbance										
Hearing Impairment										
Learning Disability										
Other Health Impairment										
Orthopedic Impairment										
Speech/Language										
Traumatic Brain Injury										
Visual Impairment										

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MontCAS, Phase 2
CRT-Alternate

System: Abcdefghijklm Nopqrst Uvwxyz
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I. Distribution of Scores

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		N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.
Advanced	123-123	XX	XX	XX	XX	XX	XX
	123-123	XX	XX		XX	XX	
	123-123						
	123-123						
	123-123						
	123-123						
Proficient	123-123			XX			XX
	123-123						
	123-123						
	123-123						
	123-123						
	123-123						
Nearing Proficiency	123-123			XX			XX
	123-123						
	123-123						
	123-123						
	123-123						
	123-123						
Novice	123-123			XX			XX
	123-123						
	123-123						
	123-123						
	123-123						
	123-123						

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			System	State
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CRT-Alternate

System: Abcdefghijklm Nopqrst Uvwxyz
Grade: 04
Spring 2006

Mathematics

System Summary Report

I. Distribution of Scores

Perf. Level	Scores	System			State		
		N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.
Advanced	123-123	XX	XX	XX	XX	XX	XX
	123-123	XX	XX		XX	XX	
	123-123						
	123-123						
	123-123						
	123-123						
Proficient	123-123			XX			XX
	123-123						
	123-123						
	123-123						
	123-123						
	123-123						
Nearing Proficiency	123-123			XX			XX
	123-123						
	123-123						
	123-123						
	123-123						
	123-123						
Novice	123-123			XX			XX
	123-123						
	123-123						
	123-123						
	123-123						
	123-123						

*The sum of the points for each standard may exceed the total points, as some items correlate with more than one standard.

II. Subtest Results

Mathematics		Possible Points	Average Points Earned	
			System	State
Total Points*		000	000	000
Standards	1. Problem Solving			
	2. Numbers and Operations			
	3. Algebra			
	4. Geometry			
	5. Measurement			
	6. Data Analysis, Statistics, and Probability			
	7. Patterns, Relations, and Functions			

-- There were too few score points to report on this standard, or no items on the test measured this standard.

CRT-Alternate Performance Level Descriptors

Advanced (score to be determined)
The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content specific performance indicators.

Proficient (score to be determined)
The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators.

Nearing Proficiency (score to be determined)
The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content specific performance indicators.

Novice (score to be determined)
The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators.

MontCAS, Phase 2 CRT-Alternate

Confidential

Mathematics

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III. Results for Subgroups of Students

Reporting Category	System					State				
	Number	% in N	% in NP	% in P	% in A	Number	% in N	% in NP	% in P	% in A
All Students	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Gender	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Male										
Female										
Ethnicity										
American Indian or Alaska Native										
Asian										
Hispanic										
Black or African American										
Native Hawaiian or Other Pacific Islander										
White										
Significant Cognitive Disability										
Special Education										
Students with a 504 Plan										
Title I (optional)										
Tested with Standard Accommodation										
Tested with Non-Standard Accommodation										
Alternate Assessment										
Migrant										
Gifted/Talented										
LEP/ELL										
Former LEP Student										
LEP Student Enrolled for First Time in a U.S. School		**Performance levels are not reported for 1st year LEP students**								
Free/Reduced Lunch										
Special Education Disability(ies):										
Autism										
Cognitive Delay										
Deaf-Blindness Impairment										
Deafness										
Emotional Disturbance										
Hearing Impairment										
Learning Disability										
Other Health Impairment										
Orthopedic Impairment										
Speech/Language										
Traumatic Brain Injury										
Visual Impairment										

*Less than ten (10) students were assessed

APPENDIX G
SAMPLE TASKLET

SAMPLE TASKLET

Content Standards Addressed: Standard 4: Geometry

4.1 Students will describe, model and classify two- and three-dimensional shapes.
4.2 Students will investigate and predict the results of combining, subdividing, and changing shapes.

Activity

This activity engages students in demonstrating and understanding of two- and three dimensional shapes by

- identifying a square among four different shapes;
- identifying 2 congruent triangles from a set of shapes.
- combining 2 triangles to make a square;
- producing a triangle.

Materials Provided

- 1 square
- 2 circles
- 2 congruent triangles
- 1 small triangle
- 2 rectangles
- 6 straws:
  - 5 inches long
- 2 straws:
  - 3 inches long
- Square templates

Other Materials Needed

- Materials typically used by the student to communicate (e.g., communication device, objects, switches, eye gaze board, tactile symbols)
- Throughout the activity, make any material substitutions necessary to enable the student to understand test questions (e.g., objects, larger print, different pictures, materials in auditory formats).
- Materials provided may need to be further adapted for students who are hearing or visually impaired. Suggestions for adapting materials are in the CRT-Alternate Administration Manual.

Materials	Activity Steps Teacher will:	Student Work Student will:	Performance Indicators Use Scoring Guide
1. • 1 square, 1 circle, 1 triangle, 1 rectangle. **Communication support strategies:** • Word/picture symbols for "yes" and "no" may be used to indicate readiness to move on. • Throughout the activity, make any material substitutions necessary to enable the student to understand test questions (e.g., objects, larger print, different pictures, materials in auditory formats).	1. Place the shapes on the work space. ***"Let's start now. Here are 4 different shapes. This is a square, this is a circle, this is a triangle, and this is a rectangle. We are going to use these shapes in our activity. Did you see/hear about the 4 shapes I just showed you?"*** Allow the student to touch the shapes.	1. Attend to the teacher naming each shape.	1. Attend to objects or pictures of two- and three-dimensional geometric shapes and the relationships among them.  Performance Indicator: 4.1.1.1 Expanded Benchmark: 4.1.1

Materials	Activity Steps Teacher will:	Student Work Student will:	Performance Indicators Use Scoring Guide
2. • 1 square, 1 circle, 1 rectangle, and 1 triangle. **Communication support strategies:** • Student may look at/point to task materials to express a choice. • Request may be rephrased to require a yes/no response (e.g., "Is this the square?") • Student may tell teacher to "stop" at desired response as teacher sequentially points to each of the 4 choices.	2. Place the shapes on the work space. ***"Here are the shapes we just looked at. Show me the square."*** Scaffold: Level 3: Remove an incorrect response. Repeat task request. Level 2: Remove another incorrect response. Repeat task request. Level 1: *"This is the square."* Assist the student as needed to identify the square.	2. Indicate the square.	2. Identify (name) shapes as circles, squares, triangles, rectangles, and ovals. o o o o o 4 3 2 1 0 Performance Indicator: 4.1.1.6 Expanded Benchmark: 4.1.1

Materials	Activity Steps Teacher will:	Student Work Student will:	Performance Indicators Use Scoring Guide
3. • 1 square • 1 circle • 1 small triangle • 2 congruent triangles **Communication support strategies:** • Student may look at/point to task materials to express a choice. • Request may be rephrased to require a yes/no response (e.g., *"Is this shape the same shape and size as this shape?"*) • Student may tell teacher to "stop" at desired location.	3. Place the shapes on the work space. ***"Show me the 2 shapes that are the same shape and size."*** Note: When removing shapes, only remove the circle, square and small triangle. Scaffold: Level 3: Remove an incorrect response. Repeat task request. Level 2: Remove another incorrect response. Repeat task request. Level 1: *"These 2 shapes are the same shape and size. They are both triangles."* Assist the student as need to identify the congruent triangles.	3. Identify the 2 congruent triangles.	3. Recognize 2-dimensional shapes as being the same (congruent) or different. o o o o o 4 3 2 1 0 Performance Indicator: 4.1.1.5 Expanded Benchmark: 4.1.1

Materials	Activity Steps Teacher will:	Student Work Student will:	Performance Indicators Use Scoring Guide
4. • 2 circles • 2 congruent triangles • 2 rectangles • Square template **Communication support strategies:** • Request may be rephrased to require a yes/no response (e.g., *"Do these 2 circles make a square?"*) • Student may tell teacher to "stop" at desired location.	4. Place 2 circles, 2 rectangles, and 2 right triangles in a random order in front of the student. ***"This is a square. Which two shapes will fit in the square?"*** Allow the student to handle the shapes. <u>Scaffold</u>: Level 3: Draw a diagonal line inside of the square. *"Which 2 shapes will fit in the square?"* Level 2: Take away the circles. Repeat the task request. Level 1: Take away the rectangles. *"These 2 triangles put together make a square."* Assist the student as needed to combine the 2 triangles to make a square.	4. Make a square placing the 2 congruent triangles on the template correctly or indicating the 2 triangles.	4. Touch and move shapes toward creating new shapes. o o o o o 4 3 2 1 0 Performance Indicator: 4.2.1.2, 4.5.1.3 Expanded Benchmark: 4.2.1, 4.5.1

Materials	Activity Steps Teacher will:	Student Work Student will:	Performance Indicators Use Scoring Guide

5.
• 6 straws:
  • 5 inches long
• 2 straws:
  • 3 inches long
• Square Template
 	
Communication support strategies:
• Request may be rephrased to require a yes/no response (e.g., *"Should I place this straw here?"*)
• Student may tell teacher to "stop" at desired location.
	5. Place the square template and the straws on the work space.
	
	"A square has 4 sides the same size. Use 4 of these straws to make a square (point to the template."
	
	Scaffold:
	Level 3: Remove one 3 inch straw and place a 5 inch straw on the template. *"I made one side of the square. Use 3 more straws to make the rest of the square."*
	Level 2: Remove the remaining 3 inch straw and place a 5 inch straw on another side of the square. *"I made 2 sides of the square. Use these 2 straws to make the rest of the square."*
	Level 1: Place the other 2 straws on the square template. *"These four straws are all the same size and make a square."* Assist the student as needed to produce a square.
		5. Use straws to make a square.	5. Produce 2-dimensional shapes.
			4 3 2 1 0
			
			Performance Indicator: 4.1.1.12, 4.5.1.2
			Expanded Benchmark: 4.1.1, 4.5.1
			
			End of Sample Tasklet

APPENDIX H
IMPLEMENTATION OF THE CRT-ALTERNATIVE STRATEGIES TO ACHIEVE INTERRATER RELIABILITY

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Implementation of the CRT-Alternative
Strategies to Achieve Interrater Reliability

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In consultation with Dr. Stanley Rabinowitz, a consultant made available to The Montana Office of Public Instruction by the U.S. Department of Education in conjunction with the state's NCLB Assessment System Review, a comprehensive plan has been developed to provide *evidence* and a *measure* of the interrater reliability of the CRT-Alt. This document provides a description of the components of this plan, as well as a discussion of the design elements of the CRT-Alt and their relationship to the issue of interrater reliability.

Design of the CRT-Alt

The CRT-Alt is a performance based assessment, measuring a student's response to a series of test items that are presented in the format of short instructional tasks. These tasks were developed by teams of Montana special and general educators, and then further refined by test developers at Measured Progress. Given the heterogeneity of the students who are eligible to be assessed with this instrument in terms of their motor, sensory, language, and cognitive skills, the test builds in considerable flexibility in regard to the materials used to present test items, and the modalities available for the student to communicate their response. For example, real objects may be substituted for the graphic materials provided in the test materials kit to accommodate students with visual limitations. In sharp contrast to this flexibility, all other aspects of the administration and scoring are tightly controlled.

Administration of the CRT-Alt incorporates a response prompting methodology known as the "system of least prompts" (Wolery, Ault & Doyle, 1992), a well-established strategy that has been found to be effective as a teaching procedure for students with severe disabilities across a wide range of applications (Doyle, Wolery, Ault & Gast, 1988). The rationale for its use in this testing context is based on the considerations summarized below.

$ Students with severe disabilities often demonstrate skill gains in small increments that would be lost if performance was scored with a dichotomous correct/incorrect response system. For this population of students, learning is typically measured in terms of the amount of support required to produce a correct response. When responses do not occur independently, a structured sequence of prompts allows teachers to consistently present and systematically control the amount of external support provided in a teaching situation. Student learning is measured in terms of increasing levels of independence (i.e., decreased reliance upon external prompts).

The CRT-Alt uses a "least to most" prompt hierarchy. As described by Wolery et al. (1992), the system of least prompts consists of a hierarchy of at least three levels. The

first level is the opportunity for a student to respond independently, without external prompts. If that does not occur, a planned sequence of prompts, arranged from the least intrusive to the most intrusive in terms of amount of assistance, is implemented. The final level of the prompt sequence results in an assisted, correct response. For the CRT-Alt, a four level hierarchy has been developed for each test item.

With origins in an applied behavior analysis model of teaching dating back to the late 1960's and 70's, the prevalence and value of this methodology for students with severe disabilities is unquestioned in the research and practice literature (e.g., Alberto & Troutman, 1995; Demchak, 1990; Falvey, 1986). While much has been learned about effective instruction for students who experience significant challenges to learning since that time, the value of systematic instructional procedures continues to be recognized. The sixth edition of one of the most popular textbooks on teaching students with severe disabilities (Snell & Janney, 2006) continues to emphasize the importance of these very procedures in working with students with severe disabilities.

$ Because prompt response systems are a common teaching approach for students with severe disabilities, teachers are familiar with this methodology and use it on a regular basis. University coursework focused on the needs of students with severe disabilities emphasizes systematic instructional procedures that are grounded in the science of applied behavior analysis. A national review of preservice programs (Ryndak, Clark, Conroy & Stuart, 2001) verifies the importance of this skill set in teacher preparation programs focused on the needs of students with severe disabilities. Since this is an effective and common teaching methodology, the approach to test administration is relatively easy for those who work with these students to understand and implement after it has been introduced.

$ In the extensive research base about response prompting systems, acceptable levels of interrater reliability have been achieved. The use of this and other response prompting methods has been the focus of research for over thirty-five years. This body of research utilizes single subject research methods (Tawney & Gast, 1984) due to the low incidence and unique characteristics of the participants in these studies. Direct observational data are collected, requiring the use of independent observers to verify the reliability of the observational data. A standard rule of thumb in this type of research is that an average reliability index of 80% is acceptable. Results typically are reporting in the 90-95% range (e.g., Colyer & Collins, 1996; McDonnell, 1987; West & Billingsley, 2005), as the prompting procedures are clearly spelled out, easy to implement, and readily observable. This evidence provides a strong foundation for the selection of this methodology for this situation.

As described, the administration of the CRT-Alt is based upon systematic procedures that are time-tested and evidence-based with the population of students for whom this test is designed. In this application, scaffolding is the term used to describe the least to most prompting process that is consistently and predictably used in the administration of each item. Directions

are provided for each item that eliminate the need for teachers to make any interpretation about how to scaffold a particular test question. This systematic structure is then directly aligned with the scoring rubric for each test item, providing a predictable and consistent structure to guide teachers in scoring the student's performance. Finally, there is a requirement that test administrators submit selected pieces of evidence for each student in all subject areas tested. Submission of concrete evidence of student's performance relative to a specifically designated test item provides a means of checking whether information recorded on evidence templates are consistent with item scores entered on student scoring forms. Collectively, these design features create a tight structure intended to provide teachers with sufficient support to implement the CRT-Alt with integrity. Other components of OPI's implementation approach, described in the next section, further support this goal.

Components of Plan to Achieve Interrater Reliability

Due to the sparse population of this geographically large state, the number of students taking the CRT-Alt is insufficient to use large-group statistical procedures to verify interrater reliability. As a result, multiple sources of information will be collected and examined contributing to what is best described as a "preponderance of evidence" approach to demonstrating interrater reliability. At each step of the training and implementation process, information will be gathered to determine whether the intended outcome of this step has been accomplished. Positive results at each step will contribute to the body of evidence suggesting that the processes and procedures used in Montana to implement the CRT-Alt yield acceptable levels of implementation fidelity and interrater reliability.

The Plan developed by The Office of Public Instruction encompasses steps that will be taken relative to training of test administrators before implementation, as well as activities undertaken during the testing window to directly measure interrater reliability relative to test scoring and fidelity in test implementation. These steps, the goals associated with each, and data collection plans are described in the tables on the following pages.

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Goal 1: High quality training will be provided for all who administer the CRT-Alt.		
Evaluation Question	**Implementation Activities**	**Evaluation Data Collected**
Is training accessible to those who will be implementing the CRT-Alt?	$ Prepare and disseminate multi-media training CD to all schools in which a student is registered for the CRT-Alt. $ Post this powerpoint on the OPI website, providing a second way in which this information can be accessed $ Embed hyperlink to survey questions at various points throughout training. $ Include questions at end to gather feedback about clarity and quality of training provided. $ Include yes/no question in Student Response Booklet to determine if test administrator accessed training materials.	$ Number of teachers administering CRT-Alt who. respond to survey questions $ Ratings of training quality derived from web. $ Proportion of test administrators reporting that they access training materials.
Upon completion of training, do test administrators have knowledge of basic CRT-Alt administration procedures?	$ Hyperlinked survey questions measuring knowledge and understanding of about essential test administration practices.	$ Percentage of accurate responses to questions.

Goal 1: High quality training will be provided for all who administer the CRT-Alt.		
Evaluation Question	**Implementation Activities**	**Evaluation Data Collected**
Upon completion of training, do test administrators have knowledge of test scaffolding procedures?	$ Training materials will include sample scenarios to model and then practice test scaffolding procedures; hyperlinked survey questions will ask respondents to describe scaffolding responses in sample test scenarios representing a range of implementation situations.	$ Percentage of accurate responses to questions.
Upon completion of training, do test administrators have knowledge of CRT-Alt scoring procedures?	$ Training materials will include sample scenarios to model and then practice scoring rubric; hyperlinked survey questions will ask respondents to score sample test scenarios representing a range of implementation situations.	$ Percentage of accurate responses to questions.
Does training result in knowledge required to customize test materials for individual students?	$ Training materials will include sample scenarios to model and then practice communication support and material customization procedures; hyperlinked survey questions will ask respondents to describe appropriate procedures for test scenarios representing a range of implementation situations.	$ Percentage of accurate responses to questions.

Goal 2: The CRT-Alt will be implemented and scored with fidelity by test administrators throughout Montana.		
Evaluation Question	**Implementation Activities**	**Evaluation Data**
Do test administrators implement the CRT-Alt with a high degree of fidelity?	$ Recruit and train independent observers to conduct classroom observations in districts throughout Montana that have clusters of students registered for the CRT-Alt (e.g., Helena, Missoula, Billings, Great Falls, Bozeman). Implement training so that is parallels that provided to test administrators. $ Develop checklist to measure fidelity of implementation procedures and include this in materials provided to test administrators as a self-check. $ Using trained observers and implementation checklist, conduct independent evaluations of implementation fidelity with sample of students across grade levels and subject areas. Begin with a minimum of 5 students/grade/ subject area and continue if acceptable levels of agreement are not obtained $ Include yes/no question in Student Response Booklet to determine if test administrator followed all identified implementation procedures.	$ Level of reliability of independent observers in scoring and test administration fidelity after receiving training. $ Percentage of test administration implementation steps performed with fidelity across observation sample. $ Proportion of test administrators reporting that they followed all practices on implementation checklist.

Goal 2: The CRT-Alt will be implemented and scored with fidelity by test administrators throughout Montana.		
Evaluation Question	**Implementation Activities**	**Evaluation Data**
Do test administrators score the CRT-Alt with a high degree of accuracy?	$ Using trained observers, conduct independent evaluations of CRT-Alt scoring with sample of students across grade levels and subject areas	$ Level of agreement obtained when comparing responses of independent observers to those submitted by Test Administrators. Item by item comparisons will be made across students.

Goal 3: Review and compile data from all sources to identify successes and needs relative to procedural fidelity and interrater reliability of the CRT-Alt.		
Evaluation Question	**Implementation Activities**	**Evaluation Data**
Does the preponderance of evidence indicate that the CRT-Alt is being implemented with fidelity and scored accurately?	$ Gather all data collected and determine whether, collectively, results indicate that current procedures are sufficient to indicate that the CRT-Alt is being administered with sufficient precision to feel confident about the results.	$ NOTE: We are seeking input from the TAC about a credible standard to establish for "a "preponderance of evidence"